

**THE IMPACT OF COMMERCIAL PAPER UPTAKE ON THE
NAIROBI SECURITIES EXCHANGE**

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DECLARATION

STUDENT'S DECLARATION

This research project is my original work and has not been submitted to any other University for examination.

Signature.....

Date.....

Ann Njeri Karimi

D63/68381/2011

SUPERVISOR'S DECLARATION

This research project has been presented for examination with my approval as project Supervisor

Signed

Date.....

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DEDICATION

I dedicate this project to my loving parents for their love and support. To Paul and Munene, you mean the world to me. To Mugi and everyone else who has offered me support throughout the course of this project.

ACKNOWLEDGEMENTS

From the initial stages to the final draft of this project for the partial fulfillment of the Master of Science in Finance degree, I owe an immense debt of gratitude to my supervisor, Dr. Aduda for his invaluable support towards this project. His constructive criticism, careful guidance and patience have been very instrumental to the completion of this project in time.

I would also like to thank the companies for availing the data I so much needed to complete this project within the time allocated to me. Special thanks go to the proposal presentation panel and colleagues who were present during the presentation of this project proposal.

Finally, but most importantly, I sincerely thank our Almighty God for giving me the strength and providing means to undertake this study. To each of the above, I extend my deepest appreciation.

ABSTRACT

The purpose of this paper is to investigate the impact of commercial paper uptake on the growth of the Nairobi Securities Exchange. The commercial paper market began a rapid growth in the 1970's and was followed by the growth of the bond market in the 1980's and 1990's. It was however seen as having reduced the role of banks in providing credit to large businesses. Commercial Paper made its debut in the Kenyan market back in 1994.

The research design used in this study was the descriptive method. This method is preferred because it allows for the prudent comparison of the research findings. The population of interest comprises of the eleven firms that have issued commercial paper in the past three years with data collected on a quarterly basis. Secondary data was used in this study. This was collected from the eleven firms that have issue commercial paper in the Kenyan market within the period of this study.

The study found out that the number of commercial paper issued, the approved amount of commercial paper and the outstanding amount of commercial paper are affected by the share volumes trades, equity turnover as well as the market capitalisation. The study also found that most investors in the commercial paper market purchase the paper at issuance and hold it until maturity. Hence, there is little trading of commercial paper in secondary markets. As a result, issuers usually finance the repayment of maturing commercial paper with newly issued commercial paper. However, the need to roll over maturing commercial paper generates the risk that investors may not be willing to finance maturing commercial paper.

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LIST OF ABBREVIATION

CBK	Central Bank of Kenya
CDS	Central Depository System
CMA	Capital Markets Authority
FISB	Fixed Income Securities Board
FISMS	Fixed Income Securities Market Segment
GCR	Global Credit Rating
IAS	International Accounting Standard
IPO	Initial Public Offer
CP	Commercial Paper
STN	Short-Term Note
DAL	Dry Associates Limited
NASI	Nairobi Securities Exchange All Share Index
CBR	Central Bank Rate
MIMS	Main Investment Market Segment
AIMS	Alternative Investment Market Segment
US	United States of America
SEC	Securities and Exchange Commission

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Commercial Paper made its debut in the Kenyan market back in 1994. It was first arranged and placed by a firm known as Dry Associates Investment Limited with the leadership of Mr. James R. Dry, an American expatriate working with the United States Agency for International Development (USAID) at the time. Commercial Paper had long been in existence in his home country. This, together with his experience in the Commercial Paper market and education made it possible for him to launch this important money market tool in Kenyan Market.

The United States commercial paper market is by far the largest in the world. It was well developed by the late 19th century. By the end of 1922, comprehensive statistics became available and revealed that there were about 2,200 issuers of commercial paper with an outstanding value of \$700 Million (Selden, 1963). The current statistics indicate that the current outstanding commercial paper value was at \$943.60 Billion (www.federalreserve.gov)

The commercial paper market rose and began a rapid growth trend in the 1970s. The growth of the junk bond market followed in the 1980s and 1990s, and was seen as having reduced the role of banks in the provision of credit to large businesses (Mishkin and Strahan, 1998). This much-remarked-upon evolution away from banks and toward the securities markets, though, has not rendered banks irrelevant (Boyd and Gertler, 1994).

While they do provide less credit than before, banks remain important, even for large firms, as the “liquidity provider of last resort.” Nevertheless this liquidity insurance role is notable in the commercial paper market, where issuers invariably secure a backup line of credit from their bank as protection against market pullbacks.

The commercial paper market received a boost from the emergence of the mutual funds market in the 1970’s that were created to offer individual investors a way to benefit from the high and rising interest rates characteristic of that period. The growing number of mutual funds has promoted the demand of commercial paper in the various markets and in particular, United States market because of their high yields and relative safety to a very large extent.

The term commercial paper (CP) refers to short-term securities where “an unsecured promissory note is issued for a specific amount and maturing on a specific day. All commercial paper is negotiable, but most paper sold to investors is held by them to maturity. Commercial paper is issued not only by industrial and manufacturing firms, but also by finance companies. Finance companies normally sell their paper directly to investors. Industrial firms, in contrast, typically issue their paper through dealers. Over the years, bank holding companies, municipalities and municipal authorities have joined the ranks of commercial paper issuers.

In Kenya, an organized secondary market for this Commercial paper has not yet developed. Commercial paper issuance and approval is regulated by the Capital Markets

Authority (CMA) whose published draft “Guidelines for Issuance of Corporate Bonds and Commercial Paper” offers directives, procedures and qualifications for issuance. As a short-term money market instrument, it is used for financing short term needs including paying quarterly tax assessments, funding inventory amongst other uses (Dry and Spencer, 2004). As a short term instrument, CP can be issued for periods from 1-365 days, although it’s most popular maturities in Kenya have been seen to be 30 and 91 days. (Dry 2004). Companies issuing Commercial paper must represent a good credit risk, are typically household names and have substantial net worth. Small companies are not preferred and indeed, investors must be willing to buy this unsecured paper based on the company’s reputation and its financial position. The sale of commercial paper by placement agents is dependent on these factors. (Karanja 2005).

Issuance of Commercial Paper can represent substantial savings as compared to bank borrowing. Apart from interest savings, there are significant “up front” savings that include annual commitment fees and a legal charge on company assets for the amount of their existing overdraft. Other charges include legal stamp duty fees and a minimal placement fees to the placing agents.

Commercial Paper is typically sold to institutional clients at an interest that is slightly above the prevailing Treasury bill. This rate is often below prevailing overdraft rates. In other words, the interest rate paid on CP must be above the Treasury bill rate of the same maturity because Treasury Bills are inherently safer than private sector debt. There is also

a potential additional interest expense savings for issuers of Commercial Paper in the form of less compounded interest.

1.1.1 Concept of Commercial Paper Uptake

For investors in Commercial Paper, increased demand has emanated from the realization that bank deposits often offer relatively lower rates in comparison. Money market funds growth has simultaneously developed with demand for commercial paper. Banks also form a significant portion of demand to fulfill its portfolio diversification need. Another feature making commercial paper attractive to investors is its availability in different tenors that are characteristically short-term in nature. This often provides an opportunity for profit taking particularly for cash rich individuals and organizations.

Amongst the list of investors in commercial paper, the largest proportion of investors is composed of fund managers then followed by banks and last but not least, individuals. The rates offered by commercial paper are pegged on Treasury bill rates plus a premium of three to five percent depending on the quality of the issue, the credit rating and the issuer's current overdraft facility rate. It has been observed that subscriptions to various commercial paper issues are high when the treasury bill rates are high.(Dry and Specer,2004).It must however be noted that when the Treasury Bill e and Central Bank Rates are high, there are notably fewer issues of CP and available programs are reluctant to get money through the facility.

1.1.2 Growth of the Capital Markets

Capital markets resemble other markets but differ in terms of the products traded and as well as their organization. They deal with the trading of securities and provide avenue where companies can raise funds to expand on their businesses or establish new ones by issuing securities owned by the companies. The capital market in Kenya is made up of stock market, bonds, mutual funds and pension funds. It is regulated by the Capital Markets Authority which was set up in 1989 through an act of Parliament. The CMA is charged with the responsibility of supervising, licensing and monitoring the activities of market intermediaries, including the stock exchange and the central depository and settlement system and all the other persons licensed under the Capital Markets Act.(www.cma.co.ke). It plays a critical role in the economy by facilitating mobilization and allocation of capital resources to finance long term productive investments.

The bonds market in Kenya trades in both the treasury and corporate bonds. While treasury bonds were introduced in the mid 1980s, corporate bonds came to the market in 1996. Despite the early initiation of treasury bonds in the market, the market remained almost stagnant, with the government using treasury bills to finance domestic debt. The market went quiet and then resumed in 1987 with the launch of two issues of 6 months and 1 year maturity instruments. (Jones, Allen (2002)). In the mid 1990's Treasury bill rates were attractive and at the same time, corporate bonds were introduced in the market. It took the government deliberate efforts in 2001 to boost activities in the market. During this period, the government adopted a policy of reducing the proportion of domestic debt in short term securities in favor of long term securities. (Jones, Allen (2002)).

In Kenya, the issuing of treasury bonds is under the jurisdiction of the Central Bank of Kenya, which acts as government of Kenya's issuing agent. The Capital Market Authority authorizes listing of both treasury and corporate bonds as long as the issuing company meets the eligible listing requirement. The primary market of corporate bonds has other players involved in the preparation of the prospectus that include arrangers, paying and receiving agents, placing agents, and guarantors. In October 2012, the Nairobi Securities Exchange launched the FTSE NSE Kenyan Shilling Government Bond Index, the world's first independently calculated benchmark index tracking the principal Kenyan government bond market. The FTSE NSE Kenyan Shilling Government Bond Index is designed to provide investors with an accurate metric to measure the performance of Kenyan sovereign debt. According to statistics available at the Nairobi Securities Exchange database indicate that the bond turnover was at 84.9 Billion with a total of 993 deals as at September 2012.(www.nse.co.ke).

1.1.3 The Impact of Commercial Paper on the Nairobi Securities

Exchange

In Kenya, dealing in shares and stocks started in the 1920s when the country was still a British colony. The market was informal and there were no rules and regulations to govern stock broking activities. In 1954 the Nairobi Stock Exchange was then constituted as a voluntary association of stockbrokers registered under the Societies Act. There are currently 55 listed firms. The Main Investment Market Segment (MIMS) is the main quotation market, the Alternative Investment Market Segment(AIMS) provides an

alternative method of raising capital to small, medium sized and young companies that find it difficult to meet the more stringent listing requirements of the MIMS. The (Fixed Income Securities Market) FISMS provides an independent market for fixed income securities such as treasury bonds and bills. Investors are seen to move their investments from the stock market when interest rates are high while the fixed income market tends to be vibrant in search of better yields.

The NSE enables idle money and savings to become more productive by bringing borrowers and lenders of money together at a low cost. It assists in educating the public about higher profits in shares and bonds and also provides daily market reports as well as price lists for the benefit of investor's ability to know the worth of their assets. It has assisted in providing financial solutions to common problems such as having investors use securities as collateral for securing loans for various purposes.

Established companies for example can raise short term finance through commercial paper; small companies can raise long term capital through selling shares; the government and even municipal councils can raise funds by floating various types of bonds and other debt instrument as an alternative to borrowing from the external market (www.nse.co.ke).

The flight to quality phenomenon, especially in financial turmoil, sees investors selling their perceived risky assets in favor of safer assets. A defining feature of flight-to-quality is an insufficient risk taking by investors. Flight-to-liquidity also refers to an abrupt shift

in large capital flows towards more liquid assets. Commercial paper is more liquid in the sense that it is short-term in nature. When rates are sufficiently high and the equities markets are dull and sluggish, CP has often benefited and has reported higher subscription rates on the existing facilities in Kenya.(Dry, 2005). This write up seeks to test this theory and find out if the impact as observed in other markets is indeed similar at the Nairobi Securities Exchange.

1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange, which was formed in 1954 as a voluntary organization of stockbrokers and is now one of the most active capital markets in Africa. The administration of the Nairobi Stock Exchange is located on the 1st Floor, Nation Centre, and Kimathi Street, Nairobi. As a capital market institution, the Securities Exchange plays an important role in the process of economic development. It helps mobilize domestic savings thereby bringing about the reallocation of financial resources from dormant to active agents. Long-term investments are made liquid, as the transfer of securities between shareholders is facilitated. The Exchange has also enabled companies to engage local participation in their equity, thereby giving Kenyans a chance to own shares. Companies can also raise extra finance essential for expansion and development. To raise funds, a new issuer publishes a prospectus, which gives all pertinent particulars about the operations and future prospects and at the same time, stating the price of the issue. A stock market also enhances the inflow of international capital. They can also be useful tools for privatization programmes (www.nse.co.ke).

The Nairobi Stock Exchange, which was formed in 1954 as a voluntary organization of stockbrokers, is now one of the most active capital markets in Africa. As a capital market institution, it plays an important role in the process of economic development. A stock market also enhances the inflow of international capital. They can also be useful tools for privatization programmes.

1.2 Statement of the problem

Commercial Paper offers four main advantages to its issuers and investors: exemption from Securities and Exchange Commission (SEC) regulation, lower costs, competitive yields, and tailored securities to meet investors' needs. In 1933, the Securities Act was established which requires that all securities offered to the public must be registered with the SEC. Although the process can be beneficial in some cases, it is very time consuming and expensive. Commercial Paper issuers are fortunate because they are able to become exempt from registration as long as the security meets three main requirements. These requirements include: maturity must be less than 270 days, notes must be not ordinarily purchased by the general public, and the proceeds of the issue must be used to finance "current transactions" (Hahn 107). By fulfilling the requirements above, firms are able to reduce costs. Firms also lower costs by using a paperless system, this quick method of delivery decreases errors, reduces delivery fees, and reduces transactions between issuing and paying agents to a single end-of-day wire, all of these improvements combined provide a significant reduction in costs (Hahn 108).

A large section of the population has seen an awakened interest in the capital markets as well as the foreign exchange markets. The equities and bonds have also not gone unnoticed at the Nairobi Securities Exchange. According to the Capital Markets Authority Annual Report 2011, new equity issues from the period between the year 2000 and the year 2011 stood at Ksh.14.815 Billion shares having raised a staggering ksh.69.14346 Billion. Off the shelf/issues by introduction raised Ksh.5.748 Billion. Participation in the primary Treasury bond issues arranged by the Central Bank of Kenya has also received a boost from various corporate and retail investors. Investment in commercial paper has however remained dull and not as vibrant choice of investment in Kenya since its introduction. The desire to research in the area of commercial paper and short-term notes in Kenya was birthed as a result of working for Dry Associates Investment Group for five years.

This Investment firm's primary business was and still remains arrangement, issuance and investment in commercial paper and short-term notes with Mr. James R Dry, a CP expert at its helm. Several attempts to grow this investment vehicle have bore little fruit in light of a blossoming Equity and Fixed income market at the Nairobi Securities Exchange. While working for this institution, we offered the largest variety of commercial paper as well as short-term notes. Interest however, remained minimal from various quotas.

Previous researches have centered on the issuance side of commercial paper. For instance, Karanja (1998) researched on commercial paper as a source of finance for publicly quoted companies while Munyoki (2000) investigated factors affecting demand

for commercial paper as a source of finance. Kinyua (2006) researched into the factors hindering the development of commercial paper in Kenya which shed some light on the current status of commercial paper issuance. There has been a limited study centering on short-term note uptake and investment in Kenya as this class of investments remains a private affair with a few elite persons and corporates participating. The relevance of my research will enable fellow researchers, academicians, investors and issuers of Commercial Paper to understand why the proliferation of this instrument remains subdued. The impact of Commercial Paper uptake will be examined to establish whether it has any relationship with the growth of the Nairobi Securities Exchange. If found, negative or positive, what will be the real consequence of those findings?

1.3 Objectives of the Study

1.3.1 Main Objective

The main objectives of the study to investigate on the impact of commercial paper uptake on the growth of the Nairobi securities exchange.

1.4 Importance of the Study

To academicians, the study will provide a useful basis upon which further studies on commercial paper uptake on the securities' market could be conducted. This research will make a contribution to the academic literature on the field of financial institution in Kenya where very little is known about its structure and application. This study will benefit investors that need to understand the pricing of these security as well as the gains

that result in investing in Commercial Paper. This will ultimately promote the comfort level of current and potential investors in the security.

The study will also provide a body of knowledge on factors the impact of Commercial Paper uptake on the Nairobi Securities Exchange. This will fill the knowledge gap since this area has not been researched widely especially in Kenya.

To the Government, the study is useful in policy formulation regarding regulatory requirements of ministry of finance through the resulting findings. It will act as a reference point by the Central Bank of Kenya, the Treasury department and in particular, the Capital Markets Authority, in managing the issuance and investment in commercial paper

This study will shed light on commercial paper uptake among Kenyan investors; hence creating awareness on who is investing in the security, how much is of it is on offer and if so what the subscription level is. Investment advisors will be able to advice clients in making investment decisions and inform them of its availability. Fund managers will also consider this investment option as part of their portfolio in line with their investment objectives and risk appetites. The study will open an avenue to scholars and form the basis for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter outlines the impact of commercial paper uptake on the Nairobi Securities Exchange. The study is subdivided into sections; the first review on four theories that include, the Behavioral Finance theory, Corporate finance theory and Firm Valuation Theory. The other sections are on Empirical review, General literature review and finally on concussion of literature review

2.2 Theoretical Framework

2.2.1 Theory of Behavioral Finance

Behavioral finance is the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on markets. (Sewell, 2005).It is often thought of as simply "open-minded finance". (Thaler, 1993). This field of finance proposes psychology-based theories to explain stock market anomalies. Within behavioral finance, it is assumed that the information structure and the characteristics of market participants systematically influence individuals' investment decisions as well as market outcomes. There have been many studies that have documented long-term historical phenomena in securities markets that contradict the efficient market hypothesis and cannot be captured plausibly in models based on perfect investor rationality. Behavioral finance thereby attempts to fill the void.

The prospect theory in behavioral finance states that investors are more likely to make an investment if it is advertised in terms of growth rather than loss. That is, an advertiser is more likely to be successful if he argues that an investment will probably return ten percent than if he argues that it might lose a hundred percent. Prospect theory is a fairly obvious concept, but it is important for would-be investors to take note of this even as they consider recommendations made by investment advisors. The Prospect theory explores how an individual behaves when faced with a risky situation. (Tversky and Kahneman, 1979). This theory suggests that when we are presented with choices, we consider the effects of each option relative to our present circumstances. Whether we will gain or lose relative to our current status quo, we will definitely prefer to gain. It is always better to receive money than to lose it. Hence, Kahneman and Tversky's crucial contribution was the recognition that losses and gains are not weighed equally - for the same amount of gains and losses, losses hurt more than gains.

The equities market in Kenya has long been touted by various stock brokerage houses as the way to go in investments. It is important to note that the primary business of these institutions is the sale of shares and bonds while earning a commission. There are fewer investment houses in Kenya involved in the issuance, arrangement and placement of commercial paper and as such more favorable advertisement is concentrated on the equities market at the Nairobi securities exchange. The psychological concept of behavioral finance referred to as availability emphasizes that "When people are asked to assess the frequency of a class or the probability of an event, they do so by the ease with which instances or occurrences can be brought to mind" (Kahneman and Tversky, 1979).

According to this theory, we will therefore tend to support loss aversion in favor of gains anticipated in favorably marketed equities by way of Initial public offers, rights issues, bonus issues and stocks splits. Commercial paper is also seen as shrouded in mystery and therefore more risky. This is however an erroneous belief as the riskiness of commercial paper will depend on the quality of issue (company issuing the commercial paper), credit rating, and guarantee status. It must be noted that debt holders rank more highly than equity holders in case of bankruptcy and repayment of monies owed to investors by issuers.

2.3.2 Corporate finance theory

Corporate finance theory was based on the Miller-Modigliani equivalence between bond and equity financing, and implied that corporate financing choices were largely governed by the tradeoff between the costs of bankruptcy (which favor equity) and the rules for taxing corporate income (which favor debt). Two alternatives to the incentive view of short-term debt which are relevant to understanding commercial paper (Diamond, 1991; Gorton and Pennacchi, 1990). Diamond (1991) provides a model that explicitly addresses firms' choices among publicly traded long-term debt, commercial paper, and short-term bank debt. For reasons similar to those described above, he too argues that unseasoned credit risks will be forced to rely on intermediated, short-term debt. For firms that do not need to rely on intermediation, he uses an adverse selection model to argue that non-intermediated, short-term debt (commercial paper) will be chosen by high-quality firms.

These modern approaches to corporate finance were dramatic departures from long-standing traditions that emphasized differences in access to particular credit markets (Butters and Lintner, 1945; Meyer and Kuh, 1957; Gurley and Shaw, 1960). Since the mid-1970s, new developments in the economics of information have paved the way for a renewed emphasis on the importance of credit-market constraints on investment and consumption (Jaffee and Russell, 1976). Short-term debt is usually understood in terms of its incentive advantages over long-term debt (Harris and Raviv, 1990). Short-term contracting limits the tendency of borrowers to increase asset risk after taking on debt. Required debt rollover implies a penalty to such a strategy that long-term contracting would not imply. This is especially true for outside debt contracts (bonds), since bondholders face costly coordination and free-rider problems in enforcing risk-limiting covenants.

2.3.3 Firm Valuation Theory

Market-driven economy investors are looking for the most profitable placement of their capital. This leads to a redistribution of the resources on an economy-wide scale away from industries and companies which use investor's capital inefficiently and destroy wealth. For corporate managers, wealth creation is fundamental to the economic survival of the firm. As suggested by Rapport (2006) managers that fail (or refuse) to see the importance of this imperative in an open economy do so at the peril of the organization and their own careers.

There are several analytical tools which can help to make wise decisions in this field. They range from traditional Dividend Discount model and Free Cash Flow (FCF) model to not so long ago created Economic Value Added (EVA) model of enterprise valuation. At the same time in line with theoretical models for valuing companies there is a market value for companies derived from market supply and demand for their stocks.

In general, if we again refer to “one value principle” described in Grant (2003), both theoretical and market approaches have to lead to the same results. But in reality there is always some discrepancy in those two values which is a result of the influence of the number of factors. Identification and analysis of those factors is of key importance for investors to discover the most profitable investments and for the economy to ensure the most efficient use of capital. The discrepancy between theoretical and market value of the company, however, should not last forever. If it happens then the capital market will be sending wrong signals to the investors about industries with high potential which use capital productively and create economic profit as opposed to the industries with low potential that waste capital and achieve economic loss. This would lead to a situation where productive industries will face a deficit of capital and unproductive industries will face a surplus of capital. Such inefficient distribution of capital finally would be a threat for the development of a real sector of the economy.

2.2.4 Theory of Efficient Market Hypothesis

The Efficient Market Hypothesis (EMH) has been seen as one of the cornerstones of modern financial economics. Fama first defined the term "efficient market" in financial

literature in 1965 as one in which security prices fully reflect all available information. The market is efficient if the reaction of market prices to new information should be instantaneous and unbiased. Efficient market hypothesis is the idea that information is quickly and efficiently incorporated into asset prices at any point in time, such that old information cannot be used to foretell future price movements. Consequently, three types of EMH have been coined.

The weak form EMH stipulates that current asset prices already reflect past price and volume information. The information contained in the past sequence of prices of a security is fully reflected in the current market price of that security. It is named weak form because the security prices are the most publicly and easily accessible pieces of information. It implies that no one should be able to outperform the market using something that "everybody else knows". Yet, there are still numbers of financial researchers who are studying the past stock price series and trading volume data in attempt to generate profit. This technique referred to as technical analysis is asserted by EMH as useless for predicting future price changes.

The semi strong form EMH states that all publicly available information is similarly already incorporated into asset prices. All publicly available information is fully reflected in a security's current market price. The public information stated not only past prices but also data reported in a company's financial statements, company's announcement, economic factors and others. It also implies that no one should be able to outperform the market using something that "everybody else knows". This indicates that a company's

financial statements are of no help in forecasting future price movements and securing high investment returns.

The strong form EMH stipulates that private information or insider information too, is quickly incorporated by market prices and therefore cannot be used to reap abnormal trading profits. Thus, all information, whether public or private, is fully reflected in a security's current market price. That's mean, even the company's management (insiders) are not able to make gains from inside information they hold. They are not able to take the advantages to profit from information such as take over decision which has been. The rationale behind to support is that the market anticipates in an unbiased manner, future development and therefore information has been incorporated and evaluated into market price in much more objective and informative way than insiders.

The random walk model of asset prices is an extension of the EMH, as are the notions that the market cannot be consistently beaten, arbitrage is impossible, and "free lunches" are generally unavailable. An investment theory that states it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information. According to the EMH, stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. As such, it should be impossible to outperform the overall market through expert stock selection or market timing, and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments.

2.3 Empirical review

Wilcox, and Stein (1997) by modeling (1) total commercial paper outstanding as a share of itself plus business loans or (2) the relative use of security-funded credit to itself plus bank loans. The latter is partly based on Oliner and Rudebusch's (1995) emphasis on a broad-based rather than a narrow (bank) -based view of the credit channel of monetary policy, and uses Flow of Funds data since 1954 and covers a broad range of credit funded with commercial paper and other market debt. The relative use of credit funded by commercial paper (e.g., commercial paper and nonbank loans funded by securities by finance companies and ABS lenders) versus bank intermediated credit reflects the advantages of avoiding bank regulations (e.g., reserve and capital requirements) relative to the advantages of banks having any informational/transactions cost advantages in lending and funding sources that are less exposed to swings in market liquidity and default risk premium.

The financial flexibility hypothesis posits that CP provides firms with flexibility in their investment and financing decisions. We focus on three aspects of financial flexibility – flexibility in the decision to borrow, flexibility with respect to the amount of borrowing, and flexibility with respect to the length of the borrowing period. Firms may desire flexibility if their future investment prospects are uncertain. If there is a high degree of uncertainty regarding the potential arrival of investment projects, flexibility with respect to the decision to borrow allows firms to observe the arrival of projects before raising capital. If the size of the potential project is unknown, or might be expected to change over time, flexibility with respect to the amount of borrowing will allow firms to match

borrowing amounts to investment needs more closely. Finally, flexibility in the length of the borrowing period is expected to be valuable to issuers when the length of the project is uncertain. Thus, we expect that flexibility will be valuable for firms that face a high degree of uncertainty about their investment opportunities.

Flexibility is also expected to be valuable for firms with uncertain cash flow streams. Since firms typically prefer to fund investment expenditures through internal cash before seeking external capital (Myers, 1984), uncertainty regarding the magnitude or the timing of internal cash flows is also expected to lead to a desire for flexibility in financing decisions.

The financial flexibility hypothesis is related to (Holmstrom and Tirole,1998). They provide a model of liquidity in which the reinvestment needs at the interim period are uncertain. (Holmstrom and Tirole ,1998) show that it is optimal for firms to insure against liquidity shocks and provide *ex ante* for funds for needed reinvestment instead of relying only on spot borrowing after the liquidity shock is realized (Holmstrom and Tirole (2000)). Firms can obtain this *ex ante* insurance by holding precautionary cash reserves or by setting up lines of credit, which allow them to borrow up to a maximum amount after the liquidity shock is realized. Both of these strategies for *ex ante* insurance against liquidity shocks are superior to spot borrowing after the realization of the liquidity shock, because the firm is able to pledge less collateral and hence raise less financing after the realization of the liquidity shock. Establishing access to a flexible source of funding before the liquidity shock is realized (or investment needs become

known) allows firms to obtain funds if needed after the liquidity shock is realized and hence is similar in spirit to establishing a credit line.

Commercial paper accounts for a large and growing fraction of short-term corporate finance in the United States. Despite its growing importance for corporate finance and despite the attention paid by macroeconomists to commercial paper as a leading economic indicator (Stock and Watson, 1989; Bernanke, 1990; Friedman and Kuttner, 1993a and 1993b; Kashyap, Stein and Wilcox, 1993), there has been virtually no econometric analysis of the characteristics of commercial paper issuers or the circumstances under which commercial paper issuance rises or falls. This is a surprising omission, given that commercial paper is the only form of publicly traded short-term debt placed by corporations.

Survey evidence by Graham and Harvey (2001) indicates that market timing is a motivation in debt issuance decisions. Guedes and Opler (1996) find evidence that firms employ more short-term debt in the capital structure when the term spread, measured by the difference in yields between long-term and short-term Treasuries, is steeper (Faulkender, 2005). They argue that firms attempt to time market conditions by issuing more short-term debt when financing costs are low relative to long-term debt. Baker et al. (2003) find that the variation in the maturity of new debt issues is related to factors that predict excess bond returns and also argue that this indicates that firms attempt to time the debt market. In contrast to these arguments, Barclay and Smith (1995) note that with

an upward sloping yield curve, the proportion of short-term debt may be negatively related to the term spread.

Commercial paper is a lower cost alternative to a line of credit with a bank. Once a business becomes established, and builds a high credit rating, it is often cheaper to draw on a commercial paper than on a bank line of credit. Nevertheless, many companies still maintain bank lines of credit as a "backup". Banks often charge fees for the amount of the line of the credit that does not have a balance. While these fees may seem like pure profit for banks, in some cases companies in serious trouble may not be able to repay the loan resulting in a loss for the banks. Like Treasury Bills, yields on commercial paper are quoted on a discount basis the discount return to commercial paper holders is the annualized percentage difference between the price paid for the paper and the par value using a 360-day year.

Specifically: $i_{cp}(dy) = [(P_f - P_0)/P_f] \times (360/h)$

and when converted to a bond equivalent yield:

$i_{cp}(bey) = [(P_f - P_0)/P_0] \times (365/h)$

Nayar and Rozeff (1994) hypothesize that an initial CP rating certifies that an issuer is of high quality. They argue that the certifying agents are bond rating agencies who assign the short-term ratings necessary for the issuance of CP and the banks that provide the backup lines of credit. Nayar and Rozeff (1994) show that, consistent with the certification hypothesis, on average; initial CP ratings are informative to investors. There is a small but positive announcement effect around new CP ratings announcements for P-

1 rated firms, but no significant announcement effect for P-2 ratings. This positive announcement effect is also, however, potentially consistent with other hypotheses, including financial flexibility. The certification hypothesis does not offer any predictions about the behavior of investment expenditures around entry into the CP. However, if certification of firm value underlies the decision to enter the CP market, we expect that the uncertainty of firm value should decline after entry into the market. This is consistent with the argument that initial credit ratings lower investor uncertainty (Wakeman (1984)). The certification hypothesis does not have clear predictions concerning the change in the uncertainty about firm value around the time of the exit from the CP market or about the amount of borrowing from the CP market.

Firms use floating rate debt, such as CP, to take advantage of favorable short-term interest rates. Thus, firms may want to enter the CP market when short-term interest rates are low relative to long-term interest rates. In addition, firms should want to increase their borrowing amounts in the CP market when short-term rates are low. Conversely, firms should exit the CP market if short-term rates are high relative to long-term rates. Faulkender (2005) provides support for the market timing hypothesis by showing that firms use more floating rate debt when the term structure is steeper. Since the interest cost of CP is linked to London Interbank Offer Rate (LIBOR), market timing considerations may drive CP issuance decisions.

2.4 General literature review

CP is short-term publicly traded, unsecured debt. It has a maturity of up to 270 days in the U.S., and the average maturity is about 45 days. However, CP can be and often is used for long-term financing. It is typically not paid back at maturity but rolled over (Ou et. al (2004)). As discussed in the Introduction, CP is an important funding source for U.S. corporations. However, CP borrowing is more concentrated than other sources of finance among a relatively small number of large and well-established firms.

Since 1970, the commercial paper market has grown enormously. In 1970 there were \$33 billion outstanding versus \$1.3 trillion outstanding at the close of 2004. Many wonder how this instrument has grown to be so large in such a short period of time. There are many different domestic and foreign issuers of commercial paper that have helped to facilitate this growth (Mishkin 461). The main issuers of commercial paper are foreign governments and corporations including banks, industrial firms, and banks. Each of these organizations sells the securities to many different buyers in return for funds which are used to finance operations, special projects, and unseen expenses. The most common buyers of commercial paper are money market mutual funds and commercial bank trust departments. The primary market is separated into categories based on whether the issuing firm sells it directly to investors or through a dealer.

Almost all CP is rated by at least one credit rating agency (Post (1992)). Moody's Investor Services started rating CP issuers in 1971 (P for Prime, NP for Not Prime), and has employed its current rating system since 1972. The current ratings are, from best to

worst credit quality, P-1, P-2, P-3, and NP. S&P has a similar ratings system as shown in Figure 1. For expositional ease, we use the Moody's taxonomy henceforth, but it should be understood that we also mean the equivalent S&P ratings (A-1 or A-1+ corresponding to P-1, A-2 corresponding to P-2, and so on). The vast majority of CP issuers are rated P-1 or P-2. Issuers rated P-3 or lower can issue only limited amounts of CP if at all (Nayar and Rozeff, 1994). One reason for the importance of a P-1 or P-2 rating is that the most important investors in CP, money market mutual funds, are only allowed to hold paper rated P-1 or P-2. Moreover, since 1991 they are not allowed to hold more than 5% of their assets in tier-2 paper, which mainly includes paper rated in the second highest category (P-2 or A-2) by any of the two rating agencies (Post, 1992). Thus, the overall size of the P-2 market is considerably smaller than that of the P-1 market.

Banks' functioning as liquidity insurance providers originated early in the development of the commercial paper market. In 1970, Penn Central Transportation Company filed for bankruptcy with more than \$80 million in commercial paper outstanding. As a result of their default, investors lost confidence in other large commercial paper issuers, making it difficult for some of these firms to refinance their paper as it matured. In response to this difficulty, commercial paper issuers began purchasing backup lines of credit from banks to insure against future funding disruptions (Saidenberg and Strahan, 1999).

One implication of the low default risk is that CP issuers are able to borrow in this market at very low rates. For example, the average daily spread of one-month non-financial CP over one-month Treasury bills between July 2001 and December 2006 was 13.6 basis

points for P-1-rated CP. Though CP borrowing rates are typically very low, they spiked sharply during the financial crisis. P-1 rated CP spreads rose to 177 basis points the day after Lehman's bankruptcy and remained above 100 basis points through November 2008. As concerns over default risk subsided with government intervention in this market, CP spreads dropped to 10 basis points in January 2009.

Borrowing rates in the CP market are lower than for bank credit lines. Using the average daily rate of non-financial CP with a maturity of 30 days and the average drawn interest rate on all short-term credit lines with less than one year maturity that are rated AA (or BBB) from Dealscan between 1998 and 2008

AA-rated short-term credit lines are priced on average 68 basis points higher than 30 day P-1-rated nonfinancial CP. The spread between BBB-rated credit lines over P-2-rated CP is slightly larger at 87 basis points. CP rates are also considerably lower than those in the bond market. Between 1997 and 2009, the average spread of 90 day P-1-rated nonfinancial CP over three month T-bills was 0.27%, while over the same period, the average spread of AAA rated corporate bonds over 10 year Treasury bonds was 1.45%.

2.5 Conclusion

CP is, of course, not the only financing source that can provide financial flexibility. In particular, credit lines can provide similar flexibility because they allow firms to borrow up to a maximum amount, but do not obligate firms to do so. Hence, with a credit line, firms can adjust borrowing amounts to accommodate fluctuations in financing needs. Sufi

(2006) shows that firms in industries with a greater seasonality in sales tend to use credit lines more extensively and also have lower cash holdings. However, he also shows that firms with a greater variability in (changes in) cash flows rely less on credit lines. Moreover, material adverse change clauses imply that firms with deteriorating cash flows face reduced availability of funds from their credit lines and the presence of restrictive covenants in credit facilities may limit the potential uses of credit lines. Thus, while credit lines are an important source of funding, their flexibility may have its limits and hence, CP access can potentially provide incremental financial flexibility. In this subsection, we analyze how our results may be affected by the existence and use of credit lines.

In this study, it is shown that both theories put forward to explain the amount of short-term debt financing that a firm employs have validity. The matching principle correctly predicts that the amount of short-term debt financing that a firm uses is directly related to the quantity of the firm's current assets. Additionally, other factors that have been shown to affect the levels of long-term debt financing that a firm employs are also shown to affect the amount of short-term debt financing that a firm uses. Specifically, the amount of firm short-term debt financing is shown to be inversely related to the amount of the firm's non-debt tax shields, growth opportunities, product uniqueness and firm size. Additionally, short-term debt financing was found to be directly related to the quantity of tangible assets the firm owns.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a discussion of the outline of the research methodology that will be used in this study. It focuses on the research design, population and sample and sampling techniques, data collection methods and data analysis methods that will be used in this study.

3.2 Research Design

The research design employed in this study was descriptive survey method. This method is preferred because it allows for prudent comparison of the research findings. According to Kothari, (1985), descriptive research attempts to describe systematically a situation, problem, phenomenon, service or programme, or provides information about, say, living condition of a community, or describes attitudes towards an issue. In this case the study will be designed to establish the factor affecting the growth of commercial paper as an investment option for Kenya investors.

3.3 Population and Sample

The population of interest comprises of the eleven firms that have issued commercial paper in the past three years. There are eleven companies listed here in appendix I. The number of companies that have issued commercial paper and illustrate the uptake of commercial paper among Kenyan investors.

3.4 Data Collection

This study used secondary data. This data was collected from the eleven firms that issue commercial paper. The specific data that will be collected is data on the impact of commercial paper on the Nairobi Securities Exchange.

3.5 Data Analysis

The data analysis package that was used is SPSS. It was used to analyze data from each of the companies and summaries the findings of the research and also prepare the representations in the form of graphs.

3.5. 1 Empirical model

Despite several weaknesses in both financial and market-based measures, more and more studies however, now rely on market-based measures. For instance, the long-run relative use of commercial paper-funded credit (*CPFC*) can be modeled as a function of non stationary (*X* vector) and stationary (*Y* vector) regulatory and risk variables reflecting the factors mentioned above. Short-run changes in *CPFC* can be modeled as a function of an error-correction term ($EC \equiv \text{actual minus equilibrium log-levels of } CPFC$), short run variables, and first-differences of any non-stationary *X* components:

$$\text{Log } (CPFC) = \lambda_0 + \lambda_1 \log(X) + \lambda_2(Y)$$

$$\text{Log } (CPFC)_t = \alpha_0 + \alpha_1 \log(EC)_{t-1} + \beta_i \log(CPFC)_{t-i} + \theta_i \log(X)_{t-i} + \delta Y_t$$

$$EC = \log (CPFC) - [\lambda_0 + \lambda_1 \log(X)] . (1)$$

This approach can be implemented with enough time series data. Unfortunately, the only consistent and long-running time series source of data to track *CPFC* into the recent times after financial crisis period is the quarterly Flow of Funds data base. Higher frequency monthly data on commercial paper that span direct and asset-back commercial paper suffer from sample breaks, and are consistently available only since 2001. This makes it difficult to identify long-run relationships and short samples are plagued by short-run trends. Monthly data on the use of commercial paper relative to bank loans (*CPBLMIX*) are modeled over 2001:02-2009:09 using a simple first difference model:

$$\Delta \log(CPBLMIX)_t = \alpha_0 + \beta_1 \Delta \log(CPBLMIX)_{t-1} + \theta_1 \Delta \log(X)_{t-1} + \delta Y_t \quad (2)$$

3.5.2 Analytical model

The data was analysed by use of descriptive statistics (e.g. mean score and standard deviation) and inferential statistics; Correlation and multiple regression;

The model specification is as follows

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$$

Where;

y = NASI

β_0 = Constant Term

β_1 = Beta coefficients

X_1 = End-Month Market Capitalization Ksh. (Bn)

X_2 = Commercial Paper Issues

X_3 = Approved amount of Commercial Paper Ksh. (Bn)

X_4 = Outstanding Amount in Commercial Paper Ksh. (Bn)

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This study presents the data analysis and interpretation of the results. This chapter provides various sections. Section 4.2 provides the Summary Statistics, Section 4.3 provides the Discussion, section 4.4 presents Empirical Model of the study and finally 4.5 summary of the chapter.

4.2 Summary Statistics

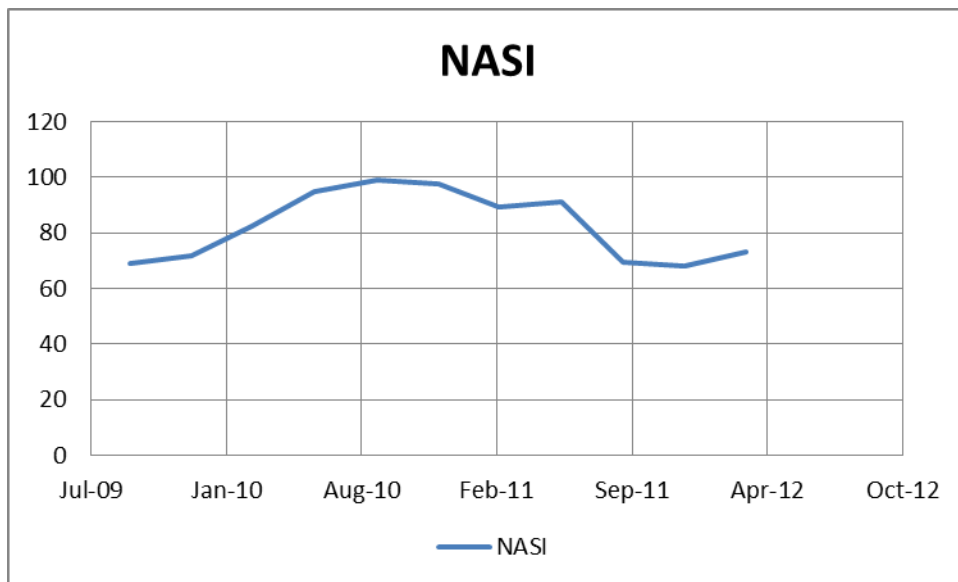
Table 4.1 Descriptive Statistics

	N	Mean		Std. Deviation	Variance
	Statistic	Statistic	Std. Error	Statistic	Statistic
NSE 20 Share Index	11	3754.3627	169.36320	561.71419	315522.834
NASI	11	82.4164	3.76281	12.47983	155.746
Share Volumes Traded Ksh. (Bn)	9	.3654	.03504	.10512	.011
Equity Turnover Ksh. (Bn)	11	11.6336	5.90980	19.60061	384.184
Bonds Turnover Ksh.(Bn)	11	40.6427	7.08407	23.49520	552.024
End-Month Market Capitalization Ksh. (Bn)	11	992.7800	43.50739	144.29768	20821.821
Commercial Paper Issues	11	4.9091	.54697	1.81409	3.291
Approved amount of Commercial Paper Ksh. (Bn)	11	2.0300	.27921	.92605	.858
Outstanding Amount in Commercial Paper Ksh. (Bn)	11	1.5325	.19030	.63117	.398
Valid N (list wise)	9				

Source: Research Findings (2012)

Descriptive statistic were used to compute for NSE 20 Share Index, NASI, Share Volumes Traded Ksh. (Bn), Equity Turnover Ksh. (Bn), Bonds Turnover Ksh.(Bn), End-Month Market Capitalization Ksh. (Bn), Commercial Paper Issues, Approved amount of Commercial Paper Ksh. (Bn) and Outstanding Amount in Commercial Paper Ksh. (Bn) for the 11 companies for the period between September 2009 and march 2012.

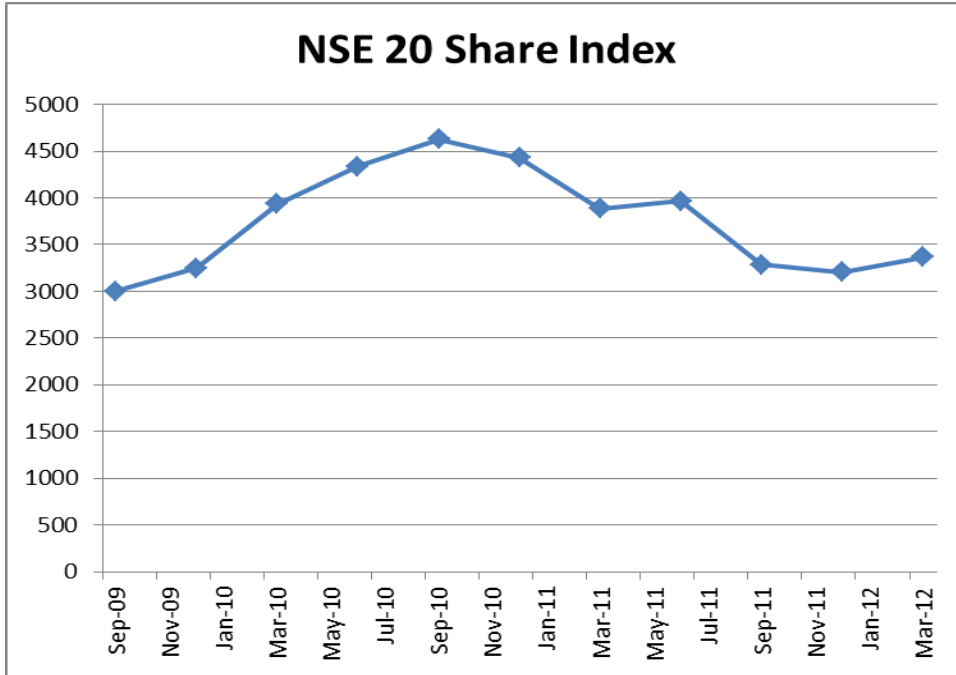
Figure 4.1: NASI



Source: Research Findings (2012)

Figure 4.1 shows trend of NASI for the period between July 2009 and April 2012 which show that there was a gradual increase from the July 2009 to August 2010 thereafter NASI decreased.

Figure 4.2: NSE 20 Share Index



Source: Research Findings (2012)

The results in figure 4.2 show parallel results with figure 4.1 where there is an increment after a period of time, that is from September 2009 to September 2010 thereafter NSE 20 share index declined.

4.3 Empirical Model

4.3.1 Reliability Test

Table 4.2 Summary of the Measurement Reliability (Cronbach's Alpha)

Cronbach's Alpha	N	Cronbach's Alpha Based on Standardized Items	No of Items
.655	11	.100	5

Source: Research Findings (2012)

Reliability is a fundamental issue in any measurement scale. Scale reliability is considered as the proportion of variance attributed to the true score of the latent construct (DeVellis, 1991; Gable, & Wolf, 1993). It is usually measured by internal consistency reliability that indicates the homogeneity of items comprising a measurement scale. Internal consistency gives the extent at which items in a model are inter-correlated. Thus, high inter-item correlations explain that the items of a scale have a strong relationship to the latent construct and are possibly measuring the same thing. Usually, the internal consistency of a measurement scale is assessed by using Cronbach's coefficient alpha. It is generally recommended that if a measurement scale having a Cronbach's coefficient above 0.50 is acceptable as an internally consistent scale so that further analysis can be possible. Considering the small number of items used to measure each of the 11 values and their necessary heterogeneity, even reliabilities of 0.5 are reasonable. Since alpha value is slightly above 0.5, the study instruments yielded fairly reliable data for this research, thus measuring NASI against End-Month Market Capitalization Ksh. (Bn), Commercial Paper Issues, Approved amount of Commercial Paper Ksh. (Bn) and Outstanding Amount in Commercial Paper Ksh. (Bn) was reliable and valid.

4.3.2 Correlation analysis

Table 4.3: Pearson Correlation

		NASI	End-Month Market Capitalization Ksh. (Bn)	Commercial Paper Issues	Approved amount of Commercial Paper Ksh. (Bn)	Outstanding Amount in Commercial Paper Ksh. (Bn)
Pearson	NASI	1.000	.962	.570	.563	.810
Correlation	End-Month Market Capitalization Ksh. (Bn)	.962	1.000	.447	.682	.854
	Commercial Paper Issues	.570	.447	1.000	.776	.602
	Approved amount of Commercial Paper Ksh. (Bn)	.563	.682	.776	1.000	.838
	Outstanding Amount in Commercial Paper Ksh. (Bn)	.810	.854	.602	.838	1.000

Source: Research Findings (2012)

Two predictor variable are said to be correlated if their coefficient of correlations is greater than 0.5. In such a situation one of the variables must be dropped from the analysis. As shown in table 4.4, none of the predictor variables had coefficient of correlation between themselves more than 0.5 hence all of them were included in the model. The matrix also indicated high correlation between the response and predictor variables, that is, End-Month Market Capitalization Ksh. (Bn), Commercial Paper Issues, Approved amount of Commercial Paper Ksh. (Bn) and Outstanding Amount in Commercial Paper Ksh. (Bn)

4.3.2 Regression analysis

A multivariate regression model was applied to determine the relative importance of each of the four variables with respect to the Employee's promotion respective to NASI

The regression model was as follows:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

y = NASI

β_0 = Constant Term

β_1 = Beta coefficients

X_1 = End-Month Market Capitalization Ksh. (Bn)

X_2 = Commercial Paper Issues

X_3 = Approved amount of Commercial Paper Ksh. (Bn)

X_4 = Outstanding Amount in Commercial Paper Ksh. (Bn)

4.3.2.1 Strength of the model

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension 1	.994 ^a	0.988	0.98	1.74506

Source: Research Findings (2012)

a. Predictors: (Constant), Outstanding Amount in Commercial Paper Ksh. (Bn), Commercial Paper Issues, End-Month Market Capitalization Ksh. (Bn), Approved amount of Commercial Paper Ksh. (Bn)

Analysis in Table 4.4 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.988, that is, 98.8% of Outstanding Amount in Commercial Paper Ksh. (Bn), Commercial Paper Issues, End-Month Market Capitalization Ksh. (Bn) and Approved amount of Commercial Paper Ksh. (Bn) have been explained leaving only 1.2 percent unexplained.

4.3.2.2 Analysis of Variance

Table 4.5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1539.189	4	384.797	126.360	.000 ^a
	Residual	18.271	6	3.045		
	Total	1557.461	10			

Source: Research Findings (2012)

- a. Predictors: (Constant), Outstanding Amount in Commercial Paper Ksh. (Bn), Commercial Paper Issues, End-Month Market Capitalization Ksh. (Bn), Approved amount of Commercial Paper Ksh. (Bn)
- b. Dependent Variable: NASI

The summary of the basic logic of ANOVA is the discussion of the purpose and analysis of the variance. The purpose of the analysis of the variance is to test differences in means (for groups or variables) for statistical significance. The accomplishment is through analyzing the variance, which is by partitioning the total variance into the component that is due to true random error and the components that are due to differences between means. The ANOVA analysis is intended to investigate whether the variation in the independent variables explain the observed variance in the outcome in this study the

outcome Level of performance. The ANOVA results indicate that the independent variables significantly in the F-Statistics produced (F=126.360) was significant at 0 per cent level (Sig. F<.005) thus confirming the fitness of the model. Analysis in table below shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables

4.3.2.2 Coefficients of Determination

Table 4.6: Coefficients of Determination

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.511	5.582		-1.166	.288
End-Month Market Capitalization (Bn) Ksh.	.087	.007	1.009	11.700	.000
Commercial Paper Issues	2.205	.490	.321	4.501	.004
Approved amount of Commercial Paper Ksh. (Bn)	-7.607	1.397	-.564	-5.446	.002
Outstanding Amount in Commercial Paper Ksh. (Bn)	4.510	2.273	.228	1.984	.004

a. Dependent Variable: NASI

Source: Research Findings (2012)

The established multiple linear regression equation becomes:

$$Y = 6.511 + .087X_1 + 2.205X_2 - 7.607X_3 + 0.421X_4$$

Where

Constant = 0.240, shows that if Outstanding Amount in Commercial Paper Ksh. (Bn), Commercial Paper Issues, End-Month Market Capitalization Ksh. (Bn) and Approved amount of Commercial Paper Ksh. (Bn) all rated as zero, NASI would be 6.511

$X_1 = .087$, shows that one unit change in End-Month Market Capitalization results in 0.087 units increase in NASI

$X_2 = 2.205$, shows that one unit change in Commercial Paper Issues results in 0.230 units increase in NASI

$X_3 = -7.607$, shows that one unit change in Approved amount of Commercial Paper results in 7.607 units decrease in NASI

$X_4 = 4.510$, shows that one unit change in Outstanding Amount in Commercial Paper results in 4.510 units increase in NASI

4.4 Summary of findings

The study found that the Approved amount of commercial paper impacts the all share index (NASI) negatively. This shows that when the amount of commercial paper approved increases, the all share index decreases. The amount of commercial paper issues and the number of outstanding issues do not seem to have a negative effect on the all share index (NASI).

The amount of approved amount of commercial paper represents the issuing companies' needs to fund their working capital requirements. This issuance need could be driven by low market interest rates prompting issuers to seek lower cost short-term funding. Their need to float commercial paper alone does not seem to have an effect in the overall

equities market activates that tend to be long term in nature. Companies floating equities often do so to finance longer term need and projects.

The number of companies issuing commercial paper does not seem to have a negative impact on the index because what matters is the size of issue. For instance, a single company could issue commercial paper of say a billion shillings while in a different period ten companies could issue commercial paper of five hundred million each issue floating an issue of fifty million or so. As illustrated, the number of companies issuing commercial paper could decrease while the outstanding amount of commercial paper decreases or vice versa.

The amount of commercial paper approved negatively impacts on the all share index . This could in essence be interpreted as the desire for companies to finance their short-term need by floating commercial paper is received well by investors who could use their funds to cash in on the high yields that could be temporarily absent in the equities markets.

The study also found out that the outstanding Amount in Commercial Paper, Commercial Paper Issues, End-Month Market Capitalization and the Approved amount of Commercial Paper are affected by the potential for both an upgrade as well as a downgrade from the existing credit rating companies in Kenya. This is in line with Wilcox, and Stein (1997) by modeling total commercial paper outstanding as a share of itself plus business loans or the relative use of security-funded credit to itself plus bank

loans. These results hold when net debt and net equity issuance are tested separately, and the results are robust to several model specifications and econometric approaches. The change specifically from investment grade to speculative grade appears incrementally significant, which is consistent with several of the hypotheses outlined for why credit ratings would be significant for firms. Ratings tests also indicate that firms are most concerned around ratings levels such that access to commercial paper is affected and bond liquidity issues are most severe.

The study found out that under normal circumstances, commercial paper offers the lowest cost source of short-term financing for large, well-established firms. The commercial paper backup line of credit, however, allows a firm to borrow from its bank at a pre-determined spread, thus providing insurance against the possibility of having to borrow when commercial paper is expensive (e.g. because outstanding paper is maturing). Borrowing in the commercial paper market may be expensive either because a firm's credit quality has declined, or because the overall supply of liquidity has declined. Firms pay their bank an annual fee for this insurance.

Assessment of the theory of behavioral finance, corporate finance theory, firm valuation theory and theory of efficient market hypothesis in light of our firms-level evidence leads us to the following conclusions. First, it is essential to recognize differences across firms in order to understand the aggregate movement of nonfinancial commercial paper. The commercial paper aggregate is dominated by a very small number of firms whose large size, strong balance sheets, and high cash flows put them in a position to issue low-risk,

highly liquid securities. There is no evidence to suggest that such firms need to issue commercial paper in order to finance cash shortfalls or reductions in alternative sources of short-term funds. But there is evidence that this select group of firms uses commercial paper to finance increases in inventories and accounts receivable. Among other things, this evidence calls for a more nuanced view of the apparent substitution among assets in the aggregate. In particular, the movements of commercial paper and bank debt may in fact reflect: an increase in commercial paper to finance accounts receivable among large, high-credit quality firms acting as intermediaries for other firms, and in turn the substitution of accounts payable for bank loans among smaller "credit-constrained" firms.

Despite the availability of alternative financing sources, limited access to commercial paper financing is related to the level of corporate inventories. Commercial paper issuers significantly reduced their inventory positions after the contraction of liquidity in the paper market. Hence, commercial paper may play a critical role in the financing of inventories for large corporations. Commercial paper is either not used for the financing of long-term projects or the substitution into alternative debt instruments attenuates potential disruptions of investment activities.

The effects of ratings on capital structure can be viewed as complementary to existing capital structure theories. Credit rating dummy variables remain statistically significant when they are nested in empirical tests of the tradeoff and pecking order capital structure theories found in Shyam-Sunder and Myers (1999) and when explanatory variables from several additional previous papers are included. This effect is supported by the high

yielding money market mutual funds, investors became increasingly reluctant to purchase commercial paper, especially for longer dated maturities. As a result, an increasingly high percentage of outstanding paper had to be refinanced each day, interest rates on longer term commercial paper increased significantly, and the volume of outstanding paper declined sharply. These market disruptions had the potential to constrain the economic activities of commercial paper issuers. Indeed, a large share of outstanding commercial paper is issued or sponsored by financial intermediaries, and the difficulties they faced placing commercial paper further reduced their ability to meet the credit needs of businesses and households.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings as discussed conclusion and discussion. This chapter provides various sections. Section 5.2 include summary of the study, section 5.3 includes conclusion, section 5.4 presents limitations of the study and finally section 5.5 is on recommendations for further research.

5.2 Summary of the Study

During the past two decades, the banking industry has had to compete with financial innovations ranging from commercial paper to junk bonds. These innovations were made possible by the advancement of information technology, which has significantly decreased transaction costs. In turn, businesses can raise money without going through the traditional lending process. Commercial paper as a source of credit decreased even more so than commercial bank loans. These facts discredit the assertion that alternative forms of borrowing were acting as substitutes: since alternative forms of lending decreased along with commercial bank lending during the period, then it was certainly not stealing customers from commercial banks. It does give credence to the view, however, that the decline in commercial bank lending was not the result of supply but instead the result of a widespread demand shift that influenced all forms of credit.

Mutual Funds in Kenya are major players in the equities and bonds markets and are exposed to daily cash redemptions of redeemable Units. They therefore invest the majority of its assets in investments that are traded at the Nairobi Securities Exchange. The Fund however, invest only a limited proportion of its assets in investments that are not actively traded; mainly local commercial paper. The Fund's listed securities are considered readily realizable, as they are listed on the Nairobi Securities Exchange.

As a result, the CP as a lender-of-last-resort facility to address the temporary liquidity distortions created by the money market reallocations. However, by law, the Reserve had to protect itself against potential credit losses.

It therefore loaned to commercial paper issuers at a penalty rate, which in turn generated income from the facility. While market rates for commercial paper were unusually high, commercial paper issuers were willing to pay the penalty rate, thereby transferring money to the taxpayer. In addition to the fee income generated by the CP, taxpayers also benefited from the facility's role in potentially preventing commercial paper issuers from being forced into bankruptcy, an event that could have distorted real investment decisions.

5.3 Conclusion

This paper Concludes that Outstanding Amount in Commercial Paper, Commercial Paper Issues, End-Month Market Capitalization and approved amount of Commercial Paper are on NASI. Managers are concerned about ratings, as observed anecdotally in the press and

through survey results. This paper demonstrates that these concerns translate into real economic decision-making consequences. Future capital structure research would benefit from including credit ratings as part of the capital structure framework, both to ensure correct inferences in capital structure empirical tests, and more generally, to obtain a more comprehensive depiction of capital structure behavior.

The major role that the stock markets have played, and continues to play in many economies is that they promote a culture of thrift, or saving. The very fact that institutions exist where savers can safely invest their money and in addition earn a return is an incentive to investors to consume less and save more. The growth of related financial services sector such as unit trusts investments clubs, pension and provident fund schemes have extensively contributed towards the deepening of the stock market. It should be appreciated that in as much as an economy can have savings, there is usually lack of established mechanisms for channeling those savings into activities that create wealth. Therefore encouraging a culture of saving in less developed financial markets may first track economic growth.

Most investors in the commercial paper market purchase the paper at issuance and hold it until maturity. Hence, there is little trading of commercial paper in secondary markets. Instead, many investors continuously roll over maturing commercial paper, which means that they purchase newly issued commercial paper from the same issuer once their holdings of commercial paper mature. As a result, issuers usually finance the repayment of maturing commercial paper with newly issued commercial paper. However, the need

to roll over maturing commercial paper generates the risk that investors may not be willing to finance maturing commercial paper. This risk is often called roll-over or liquidity risk. In this case, the issuer needs to get finance elsewhere to repay maturing commercial paper.

With regard to Commercial Paper, investments are restricted to those guaranteed by an Approved Bank or the issuer meets set financial strength conditional ties. In addition, such Commercial paper must be approved by the Capital Markets authority (CMA). The Fund is exposed to daily cash redemptions of redeemable Units. It therefore invests the majority of its assets in investments that are traded at the Nairobi Stock Exchange. The Fund invests only a limited proportion of its assets in investments that are not actively traded; mainly local commercial paper. The Fund's listed securities are considered readily realizable, as they are listed on the Nairobi Stock Exchange.

We concluded that there are three possible explanations of this apparent contradiction between aggregate and individual-level behavior that are supported by our results. First, commercial paper increases as a downturn begins because firms need to finance unplanned increases in inventories. Second, firms that can issue commercial paper act as intermediaries for other firms that may be credit constrained. Our evidence indicates that high-quality firms increase their accounts receivable during a downturn and finance these with commercial paper. Finally, it may be that commercial paper issuance increases during a downturn due to an increase in aggregate portfolio demand toward safe, liquid

assets. This explanation is consistent with our characterization of commercial paper issuers.

5.4 Limitations of the Study

This study encountered the following limitations; the limitation of time, availability of longer period data, unrealistic assumptions and financial constraint. The time available to conduct this research was relatively short as I would have desired. This resulted in the concentrate on a very shorter period of this narrow aspect of commercial paper uptake. In addition, an in-depth analysis of data collected could not be carried out. The fact that perceptions are dynamic in nature and tend to fluctuate when other variables are introduced was also a factor. As such, these research findings are subject to frequent alterations as well as different opinions.

The study's assumptions were also somewhat unrealistic in the real world. This study methodology depends on the assumption of an efficient market. This assumption is not valid in many situations and in particular, our local market in which this study was being carried out. Assuming that our market is semi-strong form efficient, investors should not be able to make a profit from the sale of shares on reliance of both public and private information. This is not necessarily the case in our local market. The length of time required for individual investors to respond to event signals is also random and therefore, the implication is that markets could exhibit market inefficiencies because prices do not instantly or fully reflect all available information.

One of the limiting factors was the availability of data on a consistent long time period. The availability of data proved to be elusive and difficult to come by. The data available at the both the Capital Markets Authority and the Nairobi Securities Exchange as Investment and Brokerage houses was scarce and intermittent. Consistent data was only available within a relatively short period in order to be used in this study. A longer period would have been desirable in order to capture the effects of Commercial Paper uptake on the Nairobi Securities Exchange: an empirical assessment of Kenya firms.

Financial constrains also limited my ability to access further information, contact more individuals and resources that would have impacted positively in this study. Difficulty with interpreting results is another difficulty. Once data has been collected and processed, carrying our interpretations becomes a challenge. Often the interpretations are more difficult in an emerging economy like ours where the number of confounding factors multiplies keep changing and cannot be compared with certainty with those of well developed markets.

5.5 Recommendations for Further Research

CP is a critically important funding mechanism for both financial and non-financial corporate sand, as reflected in the significant amount of CP that is outstanding as a percentage of overall debt instruments. It is also quite prevalent as a funding mechanism, accounting for a significant percentage of overall short-term debt. Further research that I would recommend would be the impact of commercial uptake on Treasury bond and Treasury bill markets. Commercial paper is a money market instrument and therefore its

impact and issuance on the other money market instruments like bank fixed deposits, treasury bills and bonds should be researched into. The premium attached to investing in commercial paper should be examined to determine if it's enough to entice investors in the local market to divert funds from the bank deposits, treasury bills and the repo market.

Further recommended studies should center on the profile of investors who invest in commercial paper. If commercial paper uptake is to improve in the Kenyan market then the corporate and individuals investing in it should be known and researched on in order to know why they favor this instrument.

There should be additional study on the participants of company's issuance and uptake. Companies that chose this mode of short-term finance in Kenya must be studied further to establish if there is a prevalence in a particular industry and if so why. Studies as to which institutions participate in the issuance of commercial paper should be conducted in order to assess if they contribute in any way in the limited prevalence of the instrument in our Kenyan market.

Last but not least, studies should be conducted on the quality of issues and the credit rating should be at the center of this research. The impact of credit rating on commercial paper uptake should be an area of in-depth research to ascertain if this rating would improve investor opinion and interest in commercial paper investment.

According to most market participants, the main areas of concern revolve around the following issues: Market practices related to funding by issuers of maturity presentment obligations; the impacts of the current random processing of maturity presentments; Mechanics and timing of the refusal to pay option; and the reclamation process and its effect on settlement finality.

Despite the recent crisis, it seems likely that large amounts of maturity and liquidity transformation will continue to be conducted outside of depository institutions and therefore without access to the traditional lender of last resort in what is known as “the shadow banking system.” The public sector’s role in providing backstop liquidity to the shadow banking system will continue to be debated. Although the duration of the CP was necessarily limited, the facility provides a model for a market-based lender-of-last-resort liquidity backstop, which could serve as a guide for future policy discussion.

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Appendices

Appendix I: Commercial Paper Issues 2009 September to March 2012.

- 1) Ecta (Kenya) Limited
- 2) Cooper (Kenya) Limited
- 3) Davis & Shirliff Limited
- 4) Crown Berger Limited
- 5) Synergy Industrial Credit Limited
- 6) Kenol Kobil Limited
- 7) CMC Holdings Limited
- 8) PTA Bank Limited
- 9) Kenya Kazi Limited
- 10) Kenya Hotel Properties Limited
- 11) PTA Bank Limited

Appendix II: Secondary Data

	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12
NSE 20 Share Index	3005	3247.44	3932.87	4339.28	4629.8	4432.6	3887	3968	3284	3205	3367
NASI	69.2	71.64	82.64	95.1	98.92	97.82	89.5	91.36	69.4	68	73
Share Volumes Traded Ksh. (Bn)	0.20739	0.2149	0.52577	0.36471	0.40211	0.35761	0.46903	0.41097	0.582.4	0.3365	0.366.2
Equity Turnover Ksh. (Bn)	3.55	2.59	7.03	6.8	7.74	5.88	7.98	70.5	5.5	4	6.4
Bonds Turnover Ksh.(Bn)	20.93	15.94	42.4	95.2	30.87	23.28	40.12	69.42	36.11	25	47.8
End-Month Market Capitalization Ksh. (Bn)	771.6	831.83	962.31	1109	1174	1167	1090	1121	884.8	868.24	940.8
Commercial Paper Issues	5	4	4	6	6	6	2	9	4	4	4
Approved amount of Commercial Paper Ksh. (Bn)	1.07	0.76	1.01	2.61	2.61	2.61	1.6	3.96	2.15	2.15	1.8
Outstanding Amount in Commercial Paper Ksh. (Bn)	0.96587	0.716428	0.7098	2.314	2.314	2.3013	1.5414	2.0947	1.34745	1.39	1.16288