

**A SURVEY ON USE OF MARKETABLE SECURITIES BY FIRMS
QUOTED AT NAIROBI STOCK EXCHANGE**

UNIVERSITY OF NAIROBI
LOWER KABETE LIBRARY

BY

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D61/7029/01

**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE
DEGREE OF MASTER OF BUSINESS ADMINISTRATION,
FACULTY OF COMMERCE, UNIVERSITY OF NAIROBI**

OCTOBER 2003


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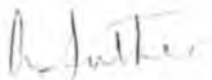
DECLARATION

This Management Research Project is my original work and has not been presented for a degree in any other University.

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This Management Research Project has been Submitted for Examination with my Approval as University Supervisor.

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DEDICATION

This Management Research Project is dedicated to my wife Nuria, son Abdullah and Mother Rodha and Gedhi.

Whatever I do, I owe them my sincere gratitude. It is God who makes success and guides in the right paths.

ACKNOWLEDGEMENT

My most sincere thanks go to my supervisor, Mr. Otieno Odhiambo Luther for his continuous follow-up, guidance and positive criticism and inspiration he accorded to me throughout this project. I want to thank him for tireless effort he gave to me from the time of project conception upto writing of final report.

Special thanks go to my wife Nuria and son Abdullah for their patience, perseverance, understanding, encouragement and their prayers throughout this MBA Programme.

I also thank my uncle Goto, Joshua, Aunts Wangari, Guye, Dalila, Dime and Julia for all kind of support they gave me to make this programme a success.

I also want my thanks to go to my elder Brother Yusuf, my parents Rodha, Ano and Mare and my in-laws Mamo and Gedhi for their encouragement, support and patience throughout the programme. I must also thank my other family members who gave me a lot of hope, encouragement and assistance. Thank you for the sacrifice.

Finally, I wish to thank Mary Muya for having typed this project work.

It is impossible to thank everyone individually but Hussein Harub of Marsabit Boys, Said and Habiba of TSC, Wolde of MAB, Hirbo Dargo of Moyale Boys and Hirbo Gino all of whom deserve special mention.

To all I say, God bless you in a special way.

Jazakum Allahu Khair

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ABSTRACT

The study set to investigate the use of marketable securities by firms listed at Nairobi Stock Exchange. This was done with the objective of finding out the extent of use of marketable securities by managers. The study identifies the motives and factors that managers consider while choosing marketable securities. The assumption in this study is that managers maximise return while minimising risk.

Data was collected by structured questionnaires and through examination of annual report.

The findings were that, firstly, firms hold marketable securities for precautionary purpose with most firms holding commercial paper. The decision to invest depends on certainty of the cash flow pattern of the investing firm and also accessibility to capital when need arises. Secondly, firms that invest in marketable securities regard the investments yield as very important. The yield is a critical variable because it compares the return from an investment to the existing market price. It is also relied on in estimating the risk of an investment. Thirdly, majority of the firms that invest in marketable securities have specialised department who undertake the investment activities. Some firms consider investing in marketable securities as part time job and a few outsource this function.

The conclusion is that firms invest in marketable securities for precautionary purpose and to earn yield till need for it arises. However, amount to hold for precautionary purpose will depend on individual firms attitude towards risk and the quality of marketable securities available.

1.0 INTRODUCTION

1.1 Background

The performance of a business depends on investment policies pursued by management. Such policies include how the funds are to be invested in various assets to generate adequate returns for the firm and specifically the owners. Investment in assets requires capital, which is normally supplied by investors. The immediate form of investment by investors is asset.

Cash is considered the most liquid asset while fixed assets are illiquid. However, cash that is underutilized or underused penalizes a company either with lost income from unmade investment or in interest charges on funds it borrows to take up the slack Desalvo (1965). Idle cash is therefore regarded as liability because it is costly.

Traditionally, a distinction is made between short-term assets and long-term assets. Such a distinction will be of less meaning if there are no differences in policies pursued in maximizing returns from each asset type. The period of investment for short-term assets focus on short-term gains while for long-term assets the focus is on long-term gains. However, short-term investments are meant to support long term financial objectives of the firm.

Agency theory tells us that managerial decisions may not always be in line with the expectations of shareholders Jensen and Meckling (1976). These could create a problem in managerial choice of assets to invest in. In which case it becomes useful surveying how managers go about asset selection. In this study an attempt is made to document the policies and practices of investment in marketable securities followed by firms quoted at NSE.

There may be surplus cash during one time in course of the year or season and a deficit during the rest of the year. In which case something need to be done with the cash.

Managers may invest in short-term investments because holding of surplus cash is risky, especially during inflation. At the same time cash deficit may disrupt the normal operation of the business. This is because firms with cash deficits is not able to meet its current obligation and take advantage of market opportunities like short term favorable cost of raw materials, wages and so on. Acute cash shortage may lead a firm into closure hence insolvency.

When inflation is high idle money losses value. Furthermore cash in a lock box does not earn any return and are exposed to theft by deceitful employees.

The major explanation given as to why firms hold cash and marketable securities is that they provide low cost financing to firms. This is because the cost of external financing is higher than that of internal financing when we take into account cost of incomplete information Myers and Majluf, (1984); agency costs and the possibility of under investment in case there is no excess cash Myers (1977). The adverse effects of excess cash include wasteful investment by managers in marginal projects.

Firms normally apportion their excess cash into those to be held in cash and those to be invested in securities. However, a problem that arises is which asset to invest into. A choice must be made where the assets available have different maturity structure, risk profile and returns.

The decision to invest in short-term and long term investments arise wherever there is surplus cash. Surplus cash arises when the receipts exceeds expenditure. The advantage of sufficient cash is that a business is better placed to take advantage or opportunities ahead of competitors in addition to avoiding bankruptcy proceedings. On the other hand, investment in securities enable the firm to earn some income on idle cash which do not have immediate use by investing in securities which matures when such cash is needed.

In the cases where a company is in the fortunate position of generating cash surpluses, then after allowing for an appropriate 'safety margin,' excess cash can be invested on a short term basis like short term interest earning deposits, marketable securities and

possibly payments in advance Pandey (1999). This is because marketable securities post higher returns than cash while at the same time could act as buffer. Marketable securities are the temporary assets and consist of assets that are liquid and readily marketable.

The management of marketable securities impact on the liquidity of a firm. Liquidity is critical because it tells us about the ability to transform immediately or on very short notice some of the assets into payment of an obligation. Cash and marketable securities are in most cases held solely for making payments.

Treasury Bills (TBs) and negotiable Certificate of Deposits (CDs) are considered marketable securities. Marketable securities are short-term funds invested into assets that can be converted into cash within a very short notice with limited penalty. It is a low risk, highly liquid and interest earning asset. Treasury Bills (TBs) issued by the Government and Certificate of Deposits by financial institutions, MCMenamin (1999) are examples of short-term investments or marketable securities. Other types of marketable securities include commercial paper, money market funds and repos among others.

Marketable securities are shown on the balance sheet as cash equivalent if maturities are less than three months at time when the investment is made; and short term investments if the maturity is greater than three months but less than one year.

On the other hand, cash is the currency and coins the firm has on hand in petty cash drawers in cash register or in checking accounts at various commercial banks where its demand deposit are maintained. Cash and marketable securities are referred to as liquid assets.

Efficient managers strike a balance between the risk and return of investing in securities. This is because earnings vary with the length of time to maturity and risk characteristics of marketable securities. On the other hand, investing in asset with very long time to maturity may interfere with the liquidity of the firm. It is possible that without quality and timely information some managers may therefore make a wrong choice of assets mix. The reasons for these behavior will vary from the managers attitude towards risk and

agency problem i.e. managers preferences overriding those of the shareholders. If the funds will be required in near future, marketable securities remains the best option.

However, a tradeoff exists between a firm's profitability and its risk Gitman (1998). A firm should keep its adequate net working capital so as to avoid technical insolvency. If it has greater net working capital, it is regarded as more liquid and therefore lower risk of becoming technically insolvent.

Different firms have different reasons for holding marketable securities. Some keep them due to the need for a substitute cash. They keep marketable securities in lieu of large cash balances, hoping to liquidate part of the portfolio to increase cash when cash shortages arise. Others keep due to the need for temporary investment. This is the case for firms which are engaged in cyclical operations and faces surplus cash flows in one time and deficit in other times Weston et al (1962).

Companies should make a proper decision on optimum amount of cash to be invested in various assets with different maturity structure. They should also in turn determine how much to invest in short terms and also long term. The use of long-term investment may be appropriate to finance long term assets while short-term investment may be used to finance short-term current assets Pandey (1999).

In deciding which marketable securities to invest into, the financial manager considers those securities which can quickly be converted into cash without loss of value (principal). This requires a proper understanding risk – return tradeoff in addition to superior managerial decision making. Successful investment is about good theory, modeling and well-trained managers.

Long-term financing provides a safety margin in availability of funds, but its higher cost may reduce the profit potential of the firm. On the other side, short-term financing assures liquidity of the firm reducing the risk of being insolvent, but it detracts firms from profit potentials Block (1992). This logic completely eliminates most long-term securities from consideration as short-term investments. This is attributable to the fear of being

insolvent in the long run. There is a tendency of long-term prices of assets variation and therefore lending short-term securities as best choice Rao (1990).

In an effort to maximize shareholders wealth, the financial manager should make a tradeoff between risk and return of the chosen securities Pandey (1999). There should be a clear policy in the financing mix decision as regards risk-return tradeoff.

In any firm, the management of liquid assets is concerned with three problems Mao et al (1978):

1. The amount of liquid resources to hold. The liquidity is the ability of an asset to be converted into cash without a significant price concession Vanhorne (1995). Firms must have adequate liquidity so as to meet its current obligation. This may be required so as to facilitate the normal day-to-day running of the business while at the same time avoiding the instances of financial distress arising due to deficit cash. It is important that firms hold adequate cash for transaction purposes while the excess invested in marketable securities whose maturity coincides with the expected payments. The firms holding of liquid resources of cash and marketable securities will vary from firms to firms. Some keep due to transaction purpose so as to finance day to day transaction, others due to precautionary purpose so as to cushion firms unexpected cash demand while others keep due to speculative purpose so as to earn interest on idle cash held by the firm Kryzanowisky (1982). All these will be discussed under Literature Review.

2. The division of liquid resources between cash and marketable securities. This is important because holding of excess cash is highly risky as it is subject to misuse by management and also arising conflict of interest between the owners and the management. On the other hand, deficit cash may lead the firms into a financial distress, hence bankruptcy due to inability of meeting its current obligation.

To avoid the problem of conflict of interest as a result of surplus cash held and also due to inadequate cash held, firms must invest in marketable securities so as to liquidate them when need arises. Firms should only keep that amount of the cash required for daily use

while the rest invested so as to earn interest for the firm. These securities should mature as and when the payment is expected. For example, investment of cash not needed for a month into 30 day Treasury Bill that matures exactly after one month. This will safeguard firms against the agency problem while at the same time being liquid enough at the right time when need arises and also earning additional income for the firm.

3. The maturity structure of the marketable securities portfolio. The period the security matures is very important to the firm. Firms should invest in marketable securities only when the idle cash may not be required so soon till the security matures.

While there have been many studies on the topic of cash management, for example by Ogalo (2001) among others, this studies differs from previous studies in two major respect. First, only short term and near cash items are considered and include CDs, TBs, Repos, among others. Secondly, to analyze the determinants of the demand for these liquid assets by quoted companies and the proportion of this in the firm's asset mix. The above will therefore form the basis of this study.

1.2 Statement of the Problem

Examination of annual reports of companies listed at the Nairobi Stock Exchange show a decline in their performance. They have been reporting much-reduced earnings with a number of them posting losses, NSE Hand Book (2002). Whenever performance is not at the required or expected levels, it is necessary examining how investors go about making investment decisions. This study aim at identifying policies and practices followed by management when investing in marketable securities. Specifically this study is about management of excess (surplus) cash.

The management of liquid assets is concerned with the amount of liquid resources to hold; the division of liquid resources between cash and marketable securities and maturity structure of marketable securities Mao (1978). Even though marketable securities with maturities less than three months are regarded as cash equivalent, there exist the difference between the two. A marketable security unlike cash is low risk and interest earning.

Liquidity is a central concept to the solvency of firms. It is only liquid firms that are solvent and could add value to shareholders. At the same time too much liquidity is costly due to low returns associated with it. As mentioned above, there are problems associated with idle cash and this makes its management important.

The excess cash held by a firm may create a free cash flow problem, Ross (1988). This is because managers may invest this free cash flow into low returns projects or waste it on other organizational inefficiencies. The behaviour of such managers will create additional costs of monitoring to the firm that effectively reduce the earnings of the company. On the other hand, agency problems could arise as managers may choose wrong assets of inappropriate maturity to suit the firm's needs and hence wealth maximization. This wrong choice could vary from managers' attitudes towards risk to managing self-interest.

If an organization could only keep that amount of cash they need for day-to-day normal transactions, the instances of fraud and mismanagement could be reduced. Alternatively, the companies should invest their idle cash in marketable securities or near cash securities as a way of holding cash so as to increase earnings on this cash while at the same time, reducing the risk of holding cash. Firms should use appropriate approaches so as to keep some cash in short-term assets and others in long-term securities.

The firm is therefore required to maintain a proper balance between liquidity and profitability. This calls for deciding how much to invest in short-term marketable securities and also how much to invest in long-term securities.

Investments in long-term securities are profitable but will increase the risk of firm insolvency due to illiquidity. On the other hand, investment in marketable securities are less risky in terms of insolvency. However, it is less profitable Block (1992). These decisions make the firm to confront the problem of choosing appropriate mix of long-term securities and short-term securities.

Ogalo (2001) carried out a study to establish the cash management policies used by firms quoted at NSE, extent of use of cash management models and factors that influence the choice of cash management. She collected data using structured questionnaires. Her findings was that quoted companies have specific policies in the management of cash balances with most companies investing in marketable securities so as to minimize opportunity cost of holding cash. Even though this study was carried on areas of cash management only little emphasis was given to areas of marketable securities management. However, she suggested a further research in the area of the use and significance of marketable securities as a way of holding idle cash.

This study therefore attempts to find out the motivation and extent of use of marketable securities by firms quoted at NSE. It will identify the practices followed by the firms who hold marketable securities and the composition of the same relative to other assets. It also seeks to ascertain the factors that influence the choice of marketable securities.

1.3 Objectives of the study

1. To find out the motivation and extent of use of marketable securities by firms quoted at NSE.
2. To find out the factors that affects the choice of the marketable securities by companies.
3. To find out the management of the marketable securities by listed firms.

1.4 Importance of the Study

This study is important to various stakeholders of the business.

1. The study will sensitize managers on proper management of marketable securities so as not to face the risk of being insolvent.
2. This study is hoped to stimulate a further research in the area of marketable securities management.

3. The study will enable the managers to use specific motives according to their circumstances and natures of operation so as to take advantage of each motives of investing in marketable securities.

4. Ensure the managers to use appropriate factors when selecting marketable securities.

2.0 LITERATURE REVIEW

2.1 Introduction

Firms should keep their cash balances liquid while at the same time balancing it against risk and return. This is because risk and return affect the firm's value and hence the wealth of the owners. The issue of risk and return tradeoff makes the investors to be compensated for any additional risk that they assume. The issue of time (waiting) which is basically about postponing present consumption for future consumption and related risk require that investors are adequately compensated, Gitman (1985).

Liquidity is the ability to buy or sell an investment quickly without a substantial price concession Reilly (1979). The firm should have sufficient liquidity so as to meet emergencies such as strikes by employees, fire, competitors, marketing campaign, etc. The firm should keep optimal cash balances to safeguard itself against the liquidity risk. This liquidity risk confronts the firm who invest the portion of their cash balances in marketable securities due to uncertainties of how long it will take to make conversion and also the price to be received.

With adequate compensation, firms will invest in risky assets because of their preferences for higher return rather than lower returns with lower risk. While making such a decision of investing in opportunities offering higher returns for the least risk, managers should also keep some balances in cash form so as to avoid losses that may occur as a result of illiquidity of the firm and hence insolvency.

For these reasons, managers of the firm will balance the amount to be invested in marketable securities and the ones to be held in cash forms. This is because the poor choice of investing in either of the two is risky and liquidity of the firm may be in problem while at the same time return could be poor. This may lead the firm to solvency due to inadequate cash flows to cover the current obligation.

Marketable securities also referred to as near cash assets are security investments or financial assets the firm can quickly convert to cash balances in a short period of time (<http://www.ustreas.gov/press/releases.com>). In comparison, cash includes currency and coins plus demand deposit account. Cash and marketable securities are the most liquid assets of the firm.

The success of the firm will therefore depend on how the firm's cash balances could be managed. The objective should be to minimize risk for the firms holding idle cash while at the same time maximizing returns to shareholders as a result of investing these idle cash in marketable securities Emery (1998).

The firm's receipt and payment pattern may not be uniform. This makes surplus in one time in a year and deficit during the rest of the years Weston (1992). This variation in cash flow level requires a strategy which avails cash when need arises while generating returns when in surplus. This therefore involves investing in marketable securities when there is surplus cash and selling them when there is deficit.

In the following section, motivation for holding marketable securities is discussed, then the factors considered by firms when selecting marketable securities. And finally various marketable securities and their management of marketable securities by firms will be considered.

2.2 Motives for Holding Marketable Securities

Companies hold cash and other temporary investments like marketable securities as financial stocks for transaction, precautionary and speculative purposes Keynes (1936). They use transaction balances to provide expected cash requirements and use precautionary balances when cash inflows are less than expected cash outflows Emery (1998). Also, companies hold compensating balances in demand deposit accounts to pay banks for credit and non credit services Myers and Maluf (1984) therefore suggested for

these reasons that companies should maintain this financial stock to reduce the hazards of asymmetric information as their balances enable companies to finance these positive NPV project internally and avoid inadvertently sending a negative signal.

The motives for holding marketable securities as an alternative to keeping idle cash includes transaction, safety and speculative, Kryzanowisky (1982). These are discussed below.

(i) The Transaction Motive

Firms may keep marketable securities so as to be converted at a later date into cash to make some known future payments. The payments may relate to bond issue about to mature, income tax payment, major modernization program planned for near future and so on.

This asset class is built from idle cash. In order to earn some returns on these funds during the period when it is idle, it should be invested. The marketable security chosen should have a maturity date that coincides with the required payment date Vanhorne (1997) This makes an instrument such as treasury bills ideal opportunities at the market place. The firm should have ready cash to finance planned and expected expenditure. Since this motive require ready liquidity of marketable securities when the planned expenditure is due, the idle cash balances should be invested in that marketable securities that mature at the time the expenditure is to be incurred. The risk and return should be traded off against the risk of holding idle cash balances. However, the selection of marketable securities should be on the basis of the risk and return, and to some extent convenience Varnhone (1997).

The managers should weigh the risk of holding large cash balances in excess of day-to-day transaction and the opportunity cost forgone as a result of not investing these cash into marketable securities. This motive requires managers to keep cash for normal trading transaction. However, he may invest in various securities with different maturity patterns that exactly coincide with the expected payment dates Kryzanowisky (1982).

Firms such as manufacturing concerns pursue this motive because they have to make timely payments for raw materials, wages, and so on. Managers of such firm can maximize the returns from these payments by investing these cash that is needed in the near future into such securities as 30-day treasury bills. In any case the maturity proceeds from the marketable security should coincide with the date of payment for such expenses. The managers however, should keep the liquidity of the firm at optimum while at the same time maximizing returns from such holdings.

(ii) The Safety (Precautionary) Motive

Marketable securities that are held for safeties are used to service the firm's cash account. Such securities must be extremely liquid. The funds tied in these securities will be needed, although exactly when is unknown Macmenamin (1999). Firms are uncertain of cash needs and must be ready to meet the unexpected cash outlays.

Such investment therefore protects the firms against the possibility of being unable to satisfy unexpected demand for cash or meeting the unexpected demand of cash at relatively high cost. There is always unexpected demand for cash resulting from machine breakdown, shift in demand of the product positively and so on. In order to control or take advantage of the situation and maximize return, they should set aside some cash balance.

Idle cash in lock box are risky to the firm and it is advisable to invest in marketable securities which are readily liquid when need arises, for example, investment in 30 days treasury bill and so on. The management of this motive will have to be properly monitored and managed as need for cash is erratic and unpredictable. This motive requires that firm's management will have to strike balance between the risk of holding idle cash balance and returns expected from marketable securities Rao (1990).

This motive get more pronounced in those firms that find it difficult predicting their cash flows to raise capital from the capital market within a short notice. In such a set up managers are forced to keep some portion of the cash in marketable securities.

Transport companies may use this motive so as to cushion itself against unexpected emergencies like machine breakdown. Weide (1985). For this reason, the firms should invest in high liquid and low risk securities such as treasury bills and CD's. If such emergencies occur prior to securities maturity, Treasury bill can be sold in secondary market while CD can be discounted so as to raise the needed cash. On the other hand, such securities will yield good return at maturity.

(iii) The Speculative Motive

Some companies may occasionally have excess cash not earmarked for any particular expenditure. Until firm finds a suitable use for these funds, it should be invested in speculative type of marketable securities to earn better returns. Speculators aim to exploit to profit from temporary fluctuations in prices Backer (2002). The approach such firms should adopt in investing in marketable securities should buy marketable securities when the cost and price is low and sell them when price is high. This will enable them to maximize returns. However, the speculative motive is only ideal when the firms have cash balances not intended for specific use in near future.

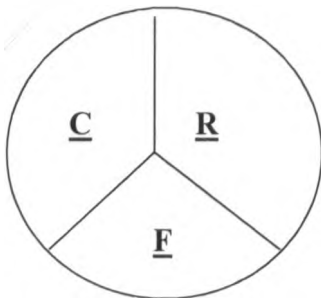
The management may not be willing to invest in long-term securities due to lengthy time involved. Managers may therefore invest in short-term securities, that are less risky and have low return. However, yield varies with terms to maturity. The agency problem may therefore arise due to this conflict of interest, Jensen et al (1976).

Monitoring cost will have to come in due to information asymmetry. It is reasonable to assume that management will have inside information which investors do not have Myers and Majluf (1987). They end up investing in safest and low return securities and not long-term securities if it satisfies their interests, even at the expense of the owners of the company.

At this stage the central objective is to make profit as a result of change in security prices. This therefore calls for continuous timing of the market such that appropriate decision is taken at the right time. In this case, they are required to monitor the security market so as to decide whether to hold fund in cash form or in marketable securities. They may hold cash when it is expected that interest rate will rise and security prices will fall. Macmenamin (1998) On the other hand, firms may invest their cash into marketable securities when interest rate is expected to fall and security prices expected to rise investment. The relevant securities are the ones that may create profitable opportunities for firm due to fluctuation in prices.

Vanhorne (1995) modified the above motives to appear as if it were a pie chart. It consists of three segments each representing different motives for holding marketable securities Chart 2.2 below presents these.

Chart 2.2: Segments representing different motives for holding Marketable Securities



Where **R** is Ready Cash Segments.

C is controllable Cash Segments.

F is Free Cash Segments

2.3: Explanation of each Segments

Controllable cash segments are the equivalent of transaction motives for holding cash. As the normal day to day expenditure are known in advance, some cash have to be kept most liquid so as to facilitate normal transaction. The known outflows may include quarterly dividends, tax payments and so on. The firm should invest these cash into marketable securities that is expected to mature when such outflow is planned. The yield may be low due to short time to maturity and it is also highly risky. In this segment, marketability is important.

However, it is important to match time needs of funds. Such securities as CD's, Repos are appropriate for this segment.

Pure cash segment Varnhone (1997) which represents speculative motives for holding marketable securities are investment of cash, are set aside with no immediate use. Such cash should be invested in marketable securities so as to earn interest. Use of this motive requires that the management monitor the fluctuation in prices of securities so as to determine when to buy or sell them so as to take market advantage. For example, when management expected that interest rate will fall and price will rise in future, they should buy them so as to sell them when interest falls subsequently and also price rises. The speculative motive requires a clear understanding of the market trends so as to take opportunities when the market moves in a direction that favours the firm. This motive entails taking high risk so as to earn return. The firm should base their choices on yield subject to risk-return tradeoffs. Any market instrument may be selected for this segment.

Finally, Ready Cash Segments are precautionary motives and are held because it acts as a reserve for the company's cash account (<http://www.ustreas.gou/press/releases.com>). The demand for cash outflows may be unpredictable and therefore securities held for this reason must be highly liquid. Such unexpected outflows could be as a result of machine breakdown, more raw materials requirements which may force the firm to dispose some of its assets at poor prices. It is therefore expected that the return will be low due to

unexpected liquidation of securities. This is an additional source of risk to a firm forced to liquidate its securities. Safety and ability to convert to cash is most important. The chance therefore remains for government securities.

In conclusion, the above pie chart can accommodate the three motives for holding marketable securities. However, the size of each segment will depend on amount of cash available to firms, their immediate commitment and also their levels of risk. The amount to be invested in marketable securities will be determined by use of cash management models as Baumol, Miller – orr, Beranek, White & Norman and Stone. This does not form the basis of this study.

The motive for holding marketable securities therefore depends on individual firm objectives for holding them. A decision is made on how much of cash could be held and how much of this amount to be distributed between short-term and long term securities.

2.4 Factors to consider in determining the proportion of Marketable Securities in the Firm's Asset Mix

The problem of what mix of cash and marketable securities to be maintained is the major decision confronting the business firms. This decision is difficult to make because it involves a tradeoff between the opportunity to earn interest on idle funds during the holding period and the cost of brokerage and management fees associated with the purchase and sale of marketable securities Gitman (1998) This tradeoff is therefore a key factor in determining just what proportion of the firms liquid asset should be held in the form of marketable securities. This decision requires a careful analysis in order to approach optimal holdings. This is because holding inadequate amount of cash and marketable securities may interrupt the normal operation of the business.

Large cash investment in marketable security minimizes chances of insolvency but penalizes company profitability. On the other hand, small cash investment free excess balances for investment in both marketable securities and long lived assets which will

enhance profits but will increase the chance of insolvency. To reduce this problem of insolvency, the firm should have proper risk return tradeoff.

2.4.1 Risk

Risk is the variability of the returns from those that are expected from an asset. The separation theorem enable to study the return and risk profiles of assets separate from the risk return attitudes of investors towards same assets.

When buying marketable investments, three types of risk affect the investments value overtime. These are – default risk, reinvestment risk and interest rate risk.

Default risk refers to the chances that the issuer may not be able to pay the interest or principal on time or at all Rao (1990). If a firm is to invest its excess idle cash, it normally does so in marketable securities with little or no default risk. Investors demand a risk premium to invest in securities other than default free securities. The greater the possibility that the borrower will default, the greater the financial risk and the premium demanded by the market place. In this case, Treasury bill is regarded as default free and other securities are judged in relation to it Vanhorne (1999). Established investment analysts frequently judge the creditworthiness of other obligations or securities on the basis of security ratings. For example Moody's investors services and standard and poor grade securities as tabulated below:

Table 2.0 Ratings by Investments Agencies

<i>Moody's Investors Service</i>		<i>Standard & Poor's</i>	
Aaa	Best quality	AAA	Highest grade
Aa	High quality	AA	High grade
A	Upper medium grade	A	Higher medium grade
Baa	Modern grade	BBB	Medium grade

Ba	Possess speculative elements	BB	Speculative
B	Generally lack characteristics of desirable investments	B	Very speculative
Caa	Poor standing; may be in default	CCC-CC	Outright speculation
Ca	Highly speculative, often in default	C	Reserved for income bonds on which no interest is being paid.
C	Lowest grade	D	In default – referred to as junk bond.

The above rating provides an easily recognizable yet simple measure that links a possible known issue of debt with a symbol of credit quality. Each debt ratings become an indication of the firm's creditworthiness with respect to specific debt issue Rao (1990). This is of great interest to those considering subscribing for those bonds.

The debts rated Aaa are judged to be of the best quality as it has the least of investment risk. While debts rated C are those with lowest rating due to extremely poor prospects of ever attaining any real investment standing. By investing in riskier securities, the firm can achieve a higher return but will face a familiar tradeoff between expected return and

risk. The choice will therefore depend on the attitudes of the management toward risk Emery (1998).

On the other hand, interest rate risk refers to fluctuation in a security price caused by changes in market interest rates Weston (1992) Interest rate, also known as price risk is the uncertainty in the return on a fixed income security caused by unanticipated fluctuations in the value of assets owing to changes in interest rates, Sharpe, Alexander and Bailey (1999). As interest rates change, the value of debt security or short-term investment changes in the opposite direction. It is therefore important that all the future changes be anticipated and taken care of in the rate to be accepted. Interest rate risk can only be avoided if the investor will know what the security will be worth at the end of the holding period. This disqualifies even Treasury bill from being a risk free asset.

Reinvestment rate risk arises when a marketable security matures before the end of investor's planned holding period, say the date when the expenditure is to be incurred. Reinvestment rate risk is the uncertainty in the return on a fixed income asset caused by unanticipated changes in the interest rate risk at which cash flow from the asset can be reinvested, Sharpe, Alexander and Bailey (1999). The risk is that the investor does not know the interest rate at which the proceeds from maturing marketable securities will be invested for the remainder of the holding period.

The type of investment therefore depends on the risk attitudes of the various firms. If an investor's preference is to earn high return, a risky security should be selected.

2.4.2 Marketability

Marketability refers to convenience and speed with which a security or an investment can be converted into cash without having to make substantial price concession, Pandey (1999), Rao (1990). The two aspects here is price and time. If security can be sold quickly without loss of price, it is highly liquid or marketable. Price realized and amount of time required to sell the asset is interrelated. For financial instruments, marketability is judged in relation to the ability to sell a significant volume of securities in a short

period of time without a significant price concession Vanhorne (1992). The more the marketable security, the greater the ability to execute a large transaction nears the quoted price.

The major determinant of security's marketability is the existence of an active secondary market for that security Pandey (1999). Secondary market is where already issued securities are sold. Some securities like shares are traded in secondary market. Firms prefer to purchase highly marketable securities as a temporary investment for cash because it can be transferred to cash.

There are managers who may not prefer to invest idle cash into highly marketable securities because of low return associated with such assets. They prefer investing in risky assets that promise higher returns. Unless such returns are available, no investment will be made. This therefore creates agency problem as they do it to satisfy self-interest at the expense of maximizing shareholders wealth. This arises especially when firms have more information than shareholders Jensen (1976). This therefore calls for the monitoring of firms cash flows Ross et al (1988).

Securities as treasury bills are risk free. On the other hand, securities like bonds and shares differ from Treasury bill because their values depend on the reputation of the firm issuing it. Valuing reputation is not easy. In any case for a security to be marketable, the firms issuing it must post good performance. This is because investors reward reputation. The risk level for such liquid securities as Treasury bill are low and yield low returns.

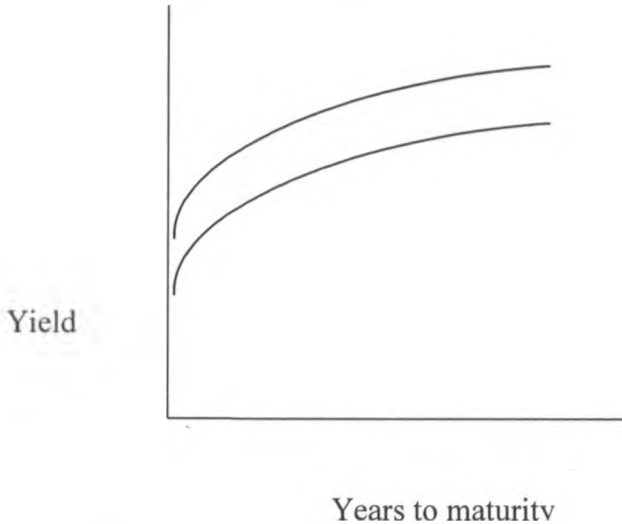
2.4.3 Term to Maturity

Maturity refers to the time period over which interest and principal are to be made Pandey (1999). It is time remaining until a bond's maturity date. Firms normally limit their marketable securities purchase to issues that have relatively short maturity. The variability in price of fixed income securities tends to increase with an increase in term to maturity because of the interest rate risk. The maturity dates of marketable securities

held should coincide with the length of time that the excess funds are not needed Rao (1990).

The relationship between yield and term to maturity can be illustrated graphically:

Fig. 2.3.5 Example of treasury yield curve



The relationship between yield and maturity above is upward sloping. This means that the longer the maturity of the investment, the higher the yield. Securities as 30-day treasury bills mature within a short time and so give low return. On the other hand, bonds or debentures having a distant maturity date post high returns.

Some firms try to take advantage of an upward-sloping yield curve by “riding the yield curve,” which involves selling securities before they mature Rao (1992).

The longer the maturity, the greater the risk of fluctuation in asset prices and hence the return offered should be higher. However, long securities are more risky than short period securities. Investment of all the firms cash balances in these securities may lead the firm into financial difficulties and hence insolvency. The management should determine how much of the idle cash balances should be invested in these securities.

Asset maturity structure should be analyzed before distributing the cash balances into different securities, while not ignoring how soon the cash is required. For example, firms should invest in 30 days treasury bills if the temporary idle cash is to be used to pay salaries and wages at month end. Assets of exceptionally long-term maturity should be avoided unless the risk premium on them is sufficient to cover for additional risk, Vanhorne (1995).

2.4.4 Yield

Yield, or return on a security is related to the interest and/or appreciation of principal provided by the security. The price of debt securities varies inversely with the interest rate or yield. The manager should therefore be aware of interest rate (yield) risk as loss may be incurred if security is sold prior to maturity and the level of interest rate has increased. Figure 2.3.5 shows the relationship between yield of a security and its year of maturity. Managers of the firm mainly prefer to invest in short-term securities instead of long-term securities because of the time long-term securities takes to mature. However, as depicted by above figure, the longer the maturity period, the higher the returns. This will therefore create agency problem as managers are seen to maximize their interest at the expense of the shareholders wealth who are interested in higher return.

2.4.5 Taxability

Differential impact of taxation will bring differences in market yield. Interest income on debt is taxable. However, interest rate income on some government and local government securities is tax exempt. Firms depending on their tax position should consider the tax implication of any investment decision they make. Some securities may be heavily taxed yet it gives a good return while others do not. Such securities as debentures or bonds are taxed while a class of local authority or treasury securities are tax exempt. They are also risk free and investors should undertake to invest in securities that best suit their profile. However, tax distorts the value of security Kolb (1988). The manager should therefore make appropriate decision on which security will maximize shareholders wealth.

2.5 Types of marketable securities the firm may consider in its asset mix

There are various marketable securities the firm can invest into. However, the choice depends on the maturity of such securities and specifically the expected return and risk. The firm's balances risk-return tradeoff of such securities so as to make the appropriate choice. The securities to be considered are money market instruments as they are highly marketable, subject to little default risk and whose maturity are less than a year. These are Treasury bills, Treasury bonds, repurchase agreement, Bankers acceptance, negotiable certificate of deposit, commercial papers, money market mutual funds, Euro dollars and money market preferred stock (<http://www.geocities.com>)

(i) Treasury securities

Treasury securities include all government securities and corporate obligation. These constitute the largest segment of the money market. The popular securities in this sector include blue chip securities, treasury bonds and notes. Investors tender for short term investments such as treasury bills. At times they are sold by auction. Treasury bills carry no coupon but are sold on discount basis. The investor's return is the difference between purchase price and the face value. Treasury securities are the safest and most marketable investment. However it provides the lowest yield.

ii) The Repurchase Agreements (Repos).

This is an agreement to buy securities (usually treasury bills) and resell them at a higher price at a later date. It is the sale of short-term securities by the dealers to the investors, whereby the dealer agrees to repurchase the securities at a specified future time. (<http://myphiliputil.pearsoncmg.com>). The investor will receive a given yield while holding the security. The maturity of this security is adjusted to suit the needs of the investors. The contract price, is fixed and protected against market price fluctuations throughout the contract period.

However, its marketability is slow even though it matures very fast. Also the default risk depends on the financial conditions and reliability of the lender.

iii) Negotiable Certificate of Deposit

This is a large denomination investment in a negotiable time deposit at a commercial bank or saving institution paying a fixed or variable rate of interest for a specified period of time. (<http://myphiliputil.pearsoncmg.com>) Rates are quoted on CDs and are changed periodically in keeping with changes in other money market rates.

Yields on CDs are greater than on Treasury bills and Repos but about the same as bankers acceptance and commercial paper. The default risk of CDs depends on that of the bank failing. When CDs matures, the owner receives the full amount deposited plus the earned interest.

iv) Commercial paper

This is a short-term unsecured promissory note, generally issued by large corporations to raise cash. It can be sold directly or through dealers. It is unsecured (IOUs) and used only by firms with good credit ratings by the issuers. They are generally sold on discount basis and maturity ranges from 30 to 70 days. The rates on commercial papers are higher than rates on Treasury bills but about same as rates on bankers' acceptance. However, investors will have to hold it till maturity, as there is no active trading in secondary markets.

v) Bankers acceptance

This is a short-term promissory note for which a bank promises to pay the holder the face amount at maturity. It is draft that is accepted by banks and is used in financing foreign and domestic trade. The credit worthiness of the banker's cheque is judged by the bank accepting the draft. The rate on bankers' acceptance is slightly higher than Treasury bill even though both are sold on discount basis.

vi) Others - Eurodollars and money market mutual funds.

Euro dollars are dollars deposited in foreign banks or in the foreign branches of US banks. (<http://www.geocities.com>) There exist active market for deposit and lending of Eurodollars. The market is free from government regulations due to its international scope.

The rates quoted varies according to the maturity of deposits while the rates on loan depends on maturity and default risk. Therefore, for any given maturity, lending rates are greater than deposit rates. Euro dollars is negotiable and highly marketable.

The choice of the security in the asset mix will depend on the risk-return tradeoff. If the firms would like to avoid risks, then Treasury bills will be the best option. On the other hand, if the firm prefers high returns without giving regard to risks, then security such as commercial papers would be the best choice. In order to come up with the best choice appropriate evaluation of each security should be made in the market.

The management of marketable securities portfolio requires clear understanding of the maturity structures of individual asset as discussed below.

2.6 Management of Marketable securities portfolio

Portfolio management of marketable securities is management of finance(money) in a way that maximizes return and minimizes risk. (<http://www.ustreas.gou/press/releases>).

Firm faces problems whenever they make decision to invest the excess cash in marketable securities. This is the choice of amount and type of securities to be invested into. The decision should be based on the result of evaluation of expected net cash flows and uncertainty inherent in the investment Vanhorne (1997). The choice of which security to invest depend on the yield curve and certainty of cash flows. The security

formally chosen will therefore justify a staff solely responsible for managing the portfolio if firms holds many securities.

a) The shape of the yield curve

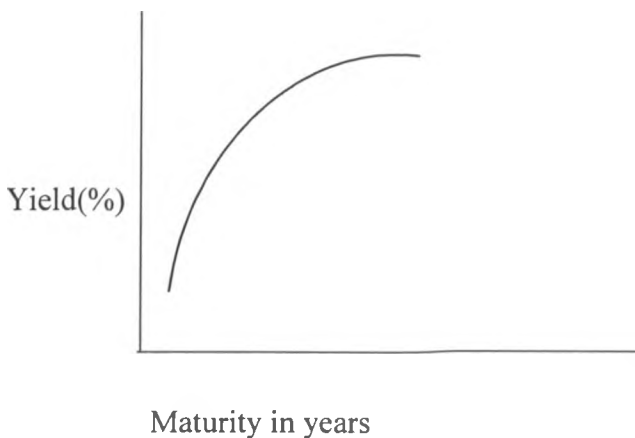
Case 1: Upward sloping yield curve Macmenamin (1999)

If the yield curve is upward sloping and future cash flow patterns are known with certainty then it means that long term securities yields more than short-term securities. In this case the firm will adopt the maturity matching strategy so that it will arrange its portfolio such that the securities selected will mature approximately when the funds will be needed Block (1998).

The certainty in cash flow patterns will enhance a firm's flexibility in maximizing the average returns on the entire portfolio since securities will not be sold unexpectedly.

The upward sloping yield is illustrated in figure 2.6 below. It summarises the relationship between yield (market return on zero coupon bond) and maturity.

Fig. 2.6 : Yield on Zero coupon securities



As depicted by the above graph the yields varies with years to maturity.

If the firm would like to increase its earnings on securities assuming that the cash flow is estimated with certainty, then it should invest in long term securities as excess cash flow will not be required so soon. However this requires proper market timing such that investment decision will not be made wrongly. Higher yield in this case will therefore be achieved by investing in long-term less marketable securities, with greater risk.

Case 2: Downward sloping yield curve

If the yield curve is downward sloping, the firms should invest in securities having maturity shorter than the intended holding period such that reinvestment can be made at maturity Varnhone (1995).

However in this case, the firms can earn high initial yield on short-term securities but it does not know what the securities will yield upon reinvestment at maturity.

b) Certainty of the cash flow projections

If the firm has high degree of predicting its cash flow with certainty then the most important characteristic of the marketable securities is maturity. In this case all the securities are considered to be reasonably of high quality of default risk. The securities will not be sold before its maturity time and hence the incidence of transaction cost will be avoided.

On the other hand, if the future cash flows are fairly uncertain, the most important characteristics of marketable securities is marketability and risk associated with fluctuations in its market values. This is because a firm's marketable securities will be sold unexpectedly at the prevailing market price. The prevailing market price may be unfavorable. In addition transaction cost will be incurred thus further reducing the sale proceeds. Under these circumstances, firm will have to balance its tradeoff between risk and profitability.

If the portfolio of the marketable securities at firms disposal are large, then there will be more chances of specialization and economies of operation. This therefore calls for a specialised staff charged with sole responsibility for managing such portfolio. Such staff can undertake research, plan for diversification, keep abreast of market conditions and continually analyze and improve the firms value. The securities held will therefore be of a diverse kind. The firms staff can continuously devote their effort in achieving the highest yield possible in keeping with cash needs of the firm.

However, firms with smaller security position may not have economic justification for a specialised staff. This is because a single individual may handle such investment on a part time basis. Such a firm will have limited diversity of securities in the portfolio.

In order to arrive at the best portfolio choice of marketable securities, the firm's Treasurer should analyze the risk return tradeoff of individual securities. However, this tradeoff will depend on the certainty of the cash flow as discussed above.

3.0 RESEARCH DESIGN AND METHODOLOGY OF THE STUDY

3.1 Introduction

This involves finding out, through a questionnaire and examination of annual reports like balance sheet of companies quoted at NSE practices and policies relating to short-term securities. This therefore calls for the study of the following:

- The proportion of the cash earmarked for investment in securities.
- The split of these proportions into short-term and long-term investments.
- Asking managers how they go about choosing marketable securities.

This section will now define the population to be covered, the data collection methods and methods of data analysis.

3.2 Population

As at March 2003, there are 48 quoted companies. Quoted companies were chosen because they are well organized and have clear policies on use of cash. Further, they are involved in investing in marketable securities even though their motives may not be known. It therefore appears that the use of quoted companies gave a clearer answer to the problem sought than small firms or other big firms which are not quoted.

3.3 Data Collection

This study uses survey methods and employ primary and secondary methods of data collection. Primary data was collected by means of structured questionnaires on motives of holding marketable securities, factors to be considered and also management of marketable security portfolio. (Sample Questionnaires is shown in the Appendix 1)

The questionnaires were structured and were administered personally in some cases and in some cases drop and pick methods was used.

The questionnaire was addressed to the firm's Treasurer.

The questionnaire is divided into three sections A to C.

Section A covers questions on the motives of holding marketable securities, Section B on factors considered when buying marketable securities and Section C covers questions on management on marketable securities.

The secondary data that was used were listed companies annual report to investigate whether the listed firms invest in marketable securities and which securities are held by them.

3.4 Data Analysis

In analyzing the data that was collected, various tools were used. Mainly frequency percentage to find out what percentage of the quoted companies use marketable security and the motive for holding marketable securities.

Spearman's rank correlation coefficient was also used to find out if there is any significant difference between factors considered by quoted firms when making investment in marketable securities.

4.0 DATA ANALYSIS, INTERPRETATION OF FINDINGS AND DISCUSSIONS

4.1 Introduction

In this section data are analysed, interpreted and discussed. From the total of forty eight (48) listed companies only twenty one (21) of these responded to the questionnaire. This represents forty six percent (46%). This was supplemented with the annual reports for the year 2002.

4.2 Motivation for use of Marketable Securities

4.2.1 Extent of Use of Marketable Securities

According to annual reports for the year 2002, all the listed companies have cash deposits with different banks. The following table gives the percentage of the firms that invest in marketable securities. However, only fifty four point eight percent (54.8%) invest in marketable securities. The summary of this is shown in Table 4.2.1

Table 4.2.1 summary of firms and marketable securities as per 2003 annual report

TYPES OF SECURITY	% NO. OF FIRMS THAT INVEST IN MARKETABLE SECURITIES
Treasury Bills	20.8%
Repos	2%
Commercial Paper	25%
Treasury Bonds that mature within 3 months	
Treasury Bonds that mature after 3 months	18.75%

As it is evident from above summary, twenty five per cent (25%) of the listed companies borrows using commercial paper while two per cent (2%) have repurchase agreement with central bank and twenty point eight per cent (20.8 %) invest in a treasury bill of one

to three (1-3) months while eighteen point seventy five per cent (18.75 %) invest in treasury bill with maturity less than one year but more than three (3) months. This shows that thirty nine point six per cent (39.6%) of the listed companies invest in marketable securities . Further, twelve point five per cent (12.5%) invest in long term treasury bond. This therefore shows that forty five point eight per cent (45.8%) of the listed companies make investment in both marketable and non-marketable securities. The use of commercial papers by quoted firms showed that they are exceptionally good credit risk and in agreement with AAA Moody's credit ratings.

However, earlier study by Ogalo (2001) that sixty seven per cent (67%) of the listed companies invest in marketable securities, the findings in this study is that only sixty seven percent (67%) invest in marketable securities. Unlike her study where treasury bills was most preferred, in this study have been seen that most companies use commercial papers while treasury bills ranks second. This is because firms in Kenya continually face liquidity problems due to intense competition both globally and locally and so the need for finance to expand its products and market. The findings also revealed that sixty one point five percent (61.5%) of these are from financial and investment sectors while seven point seven per cent (7.7%) is from commercial and service sector fifteen point three per cent (15.3%) from industrial and allied and fifteen point three per cent (15.3%) from alternative investment market segment.

4.2.2 Reasons for Investing in Marketable Securities

The following table shows the percentage of firms with different reasons when making investment in marketable securities.

Table 4.2.2 Percentage of the firms for choice of the reason for investing in Marketable Securities

REASONS	PERCENTAGE NO. OF FIRMS
Decision to finance known expenditure	57.1%
Decision to cushion firms against unknown expenditure	61.6%
Decision to earn income on cash not so soon needed	57.1%
All the three reasons above	38%

Different firms invest in marketable securities for different reasons. The firms also attach different importance to the reason they consider when making investment. As depicted by Table 4.2.2, fifty seven point one per cent (57.1%) of the companies said they invest so as to finance known expenditure while sixty one point six per cent (61.6%) invest so as to cushion firm against expected cash needs and fifty seven point one per cent (57.1%) invest so as to earn income on cash not so soon needed. However, thirty eight per cent (38%) of the respondents agree that they consider the above three reasons when making investment in marketable securities. It is therefore seen that firms invest in marketable securities so as to cushion itself against unknown expenditure. This imply that only thirty eight percent (38%) agree with the three segments as suggested by Varnhorne (1999) and Kryzanowisky (1982).

Since firms are uncertain of tomorrow, they keep their cash balance in precautionary motives so as to use when need for it arises. The other two motives - speculatives and transaction ranks second.

This findings is therefore not consistent with earlier studies by Ogalo (2001) on motives for holding cash where transaction motives was the most important as a means for facilitating transaction. However, this study concurs with Campsey (1985) that firms hold marketable securities are primarily for precautionary purpose.

4.2.3 Cashflow Pattern

The decision to invest in marketable securities will depend on the cash flow pattern of the firm. Summary of cashflow patterns of the firm is in table 4.2.3. This shows that fifty seven per cent (57%) of the respondents have their cashflow pattern to be certain while twenty eight point six per cent (28.6%) have their cashflow pattern to be uncertain. Yet four point eight per cent (4.8%) have their cashflow to be certain and at the same time uncertain, nine point five per cent (9.5%) of the firms assume their cashflow to be seasonalised and hence cannot be certain or uncertain.

Table 4.2.3 Cashflow Pattern of the Firm

PATTERN	PERCENTAGE NO. OF COMPANIES
Certain	57%
Uncertain	28.6%
Others	9.5%

One of the respondent explained why it was certain and uncertain at the same time as *certain for long term when long term assets needs to be matched and uncertain when trading on interbank which is dependent on customer needs.*

4.2.4 Borrowings by Firms

Firms are normally faced with inadequate cash to cover its current obligation. They are therefore forced to borrow from banks and non-bank institutions to ease this problem.

It has been revealed by the study that ninety point five per cent (90.5%) of the respondents borrows the funds when need arise but only fifty seven point one per cent (57.1%) are certain about these borrowing and only sixty one point nine per cent (61.9%) can predict the interest rate on borrowing with ease, Yet only nine point five per cent (9.5%) of the respondents do not borrow funds as they have excess liquidity.

On the other hand, thirty three point three per cent (33.3%) of the respondents who borrows funds when need arises regards the borrowing cost uncertain and twenty eight point six per cent (28.6%) cannot predict the interest rate on borrowing with ease.

This study like earlier study by Ogalo (2001) found out that majority of respondent borrows funds. One of the treasury manager who responded to the questionnaire explained as *firm borrows and borrowing cost is certain because of interbank borrowings and lending rates.*

4.3 Analysis for the Factors considered by Firms when making investment in Marketable Securities

4.3.1. Factors Considered when making Investment in Marketable Securities

When making investments, listed firms attach different importance to different factors. The following Table 4.3.1a summarises the per cent number of companies that consider different factors:

Table 4.3.1a factors considered by firms

FACTORS	PERCENTAGE OF COMPANIES
Yield	61.6%
Maturity	61.6%
Risk	52.3%
Tax	42.8%
Others	0%

As can be seen, sixty one point six per cent (61.6%) of the respondents considered yield and terms to maturity of marketable securities while thirty two point three per cent (32.3%) consider risk and forty two point eight per cent (42.8%) consider tax. This shows that firms consider yield and terms to maturity to be very important when making investment decisions. This study just like that of Ogalo (2001) reveals that most firms give more emphasis to yield when making investment decision. But according to one

respondent, all the factors are equally important. He expressed that factors considered are yield, terms to maturity, counter party risk, counter party limits and credit risk assessment. However, to find which factor ranks most i.e. factors that is being considered by all the listed firms who make investment in marketable securities, Pearson rank correlation is used. The result is shown in Table 4.3.1b below:

Table 4.3.1b: Pearson Rank correlation for factor considered.

	Y	TTM	R	T
Y	1			
TTM	0.997	1		
R	0.956	0.967	1	
T	0.918	0.931	0.961	1

As can be depicted by the above table, all the firms who responded to the questionnaire gave almost identical ranking to all the variables. This is why the correlation between various two factors is almost one (1). The least correlation between yield and tax suggest that some firms that rank yield highest might not attach same ranking to tax, i.e. all the firms consider yield, but when yield is compared to terms to maturity, it ranks second with correlation of 0.99,0.95 for risk and 0.91 with tax. This shows that all the factors are equally important , but given a varied choice, they opt for yield first.

4.3.2 Amount of Investment in Marketable Securities

In determining the amount of investment in marketable securities, firms consider different reasons. These reasons are summarised in Table 4.3.2a below.

Table 4.3.2a Factors Considered in Deciding Amount of Investment

FACTORS	PERCENTAGE OF THE FIRMS
Methods of management towards risk	61.6%
Certainty regarding magnitude and timing of cashflows	61.6%
Risk of illiquidity	61.6%
Tradeoff between risk and profitability	47.6%

The listed firms consider methods of management towards risk, certainty regarding magnitude and timing of cashflows, and risk of illiquidity when determining amount of cash to be invested into marketable securities i.e. sixty one point six percentage (61.6%) of the respondents.

However, forty seven point six per cent (47.6%) only consider tradeoff between risk and profitability. This shows that all the factors are given equal weight by all the firms except tradeoff between risk and returns.

In order to find out which factor was used by almost all the companies who invest in marketable securities, pearson rank correlation was used and is summarised in Table 4.2.3b.

Table 4.3.2b Pearson Rank Correlation for Factors Considered in Deciding Amount of Investment

	MMR	RILL	CRM	TRP
MMR	1			
RILL	0.975	1		
CRM	0.966	0.994	1	
TRP	0.995	0.962	0.947	1

As shown in above table the correlation between any two factors is one (1). The lowest correlation is between tradeoff between risk and profitability and certainty regarding

magnitude and timing of cashflows. This is because firms attach different importance to all factors. The listed firms therefore consider all the factors when deciding how much to invest in marketable securities.

4.4 Management of marketable securities

In order for the firm to specialize in trade of marketable securities and also maximize returns from it, a specialised management is important. This is case for firms that handles a portfolio of marketable securities. This finding showed that sixty nine per cent (69%) of the firms who invest in marketable securities have separate specialized management for marketable security portfolio. These management have attained a university degree level. These departments have different names. Some call it treasury department, others call it money market instrument department. This management are continually in touch with the market so as to take any opportunity by proper market timings on when to buy , hold or dispose it off.

However, twenty three percent (23%) of the respondents do not have specialized management but it is managed by finance department as a part time job. Yet seven point seven per cent (7.7%) outsource the service of portfolio management to outside professionals.

This findings is in agreement with Varnhorne (1999) that firms only have specialized management if the portfolio of marketable securities is large. Those firms with few securities deals as part time job while a few of them outsource the service to professional firm.

5.0 SUMMARY, CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS OF THE STUDY AND SUGGESTION FOR FURTHER RESEARCH.

5.1 Summary, Conclusion and Recommendation

This report is on the use of marketable securities by firms listed at Nairobi Stock Exchange. The first objective was on extent of use of marketable security by firms quoted at NSE. Most of the listed firms invest in marketable securities with exception of a few. However, the decision to invest or not by firms depend on the cashflow pattern. The majority of the firms that invest in marketable securities has cash flow pattern to be certain. On the other hand, few of them with uncertain cashflow will invest in marketable securities.

Majority of the firms invest in securities such as commercial papers and government securities that mature within one year. Commercial paper is most preferable followed by treasury bills and treasury bonds that mature within one year. Most companies choose commercial paper as a way of easing liquidity problem and due to good credit rating.

Majority of the firms with exception of few borrow funds when need arises. Firms are in competitive market and so need for cash to facilitate its efficiency.

Most companies hold marketable securities for precautionary purpose. Transaction and speculative ranks less in importance. This is because the future of business is uncertain and so the need to keep the firms liquidity ready to cushion firms against uncertain expenditure.

In Kenya there are few marketable securities from which the firms could choose. This does not give managers a latitude to diversity since different firms have different cashflow pattern. To safeguard itself against unexpected cash needs, firms invest for precautionary purpose. Managers feel that, if faced with cashflow problem, firms should

choose borrowing as a last resort. This is because managers consider it expensive to borrow compared to using internally generated funds.

The second objective sets to find out at the factors considered by firms when making investment in marketable securities. Most firms consider yield and terms to maturity of marketable securities. This shows that firms consider an investment only if it promises good returns. Maturity is equally important suggesting short-term in other market.

The third objective is on management of marketable securities. Most of the firms that invest in marketable securities have different specialized management who undertake all the issues relating to investing of marketable securities. It is only few of them who handles this marketable securities on part time basis. The recent development was also for a few companies who outsource the service to outside professional firms. Whether the firms should have a specialized management or not will depend on the number of the marketable securities and the volume of transactions. However, if the firms have adequate resources for this different department and handles large number of portfolio then it is justified to have specialized management and to be headed by treasury manager.

The findings revealed that listed firms invest in marketable securities. However whether to invest and amount to invest will depend on various factors and includes the following.

- i) the underlying regulation that guides the industrial firms. For example, the amount to invest in marketable securities by banks are dictated by banking act and that of insurance by insurance act.
- ii) certainty of cashflows. This means that if the firms are certain of their cashflows i.e receipt and payment, then the firms can make decision to invest on the other hand, if the firm have uncertain receipt and payment, then it will not invest due to fear of financial distress and hence bankruptcy.

iii) The management attitude towards risk. This confirms that most management are risk averse and can only make decision if the investment will add value to the firm.

iv) The policy of the firm. Different firms have different policy for investment. Some may have policy to finance its cash needs by use of commercial paper while others use Repos.

It is also noted that firms especially in agricultural sector have cashflows that fluctuate because of seasonality and business cycle. Such firm therefore use excess cash to build slack till the demand picks up. Those companies who do not invest in marketable securities holds excess cash as a buffer so as to meet unpredictable financial needs and may not commit itself for investment in marketable securities.

This study confirms that to central concepts of finance and investments namely risk and returns are internalised by managers when making decisions to invest in marketable securities.

5.2 LIMITATIONS OF THE STUDY

In process of carrying out this studies a number of limitations was encountered. These limitations are as follows:-

- a) There was inadequate literature review material available on the areas of marketable securities management and also those relevant to the situations in Kenya. This is a major limitation as the study does not have local example backing.
- b) There was difficulty in filling out the questionnaires. The total respondents that the study targets are firms listed at NSE and they are forty eight (48). Out of these, only twenty one (21) responded to the questionnaire. The targets respondents are finance or treasury manager who claimed that they are busy after several calls and personal

visit while others openly refuse to fill the questions. This made the study to take a lot of time and money and yet only few responded despite this effort.

c) Most of the respondent claimed the issue to be confidential and still others are not “in the office” and their questionnaires are unfilled as they regarded waste of time in filling the questionnaires.

d) The listed firms are scattered all over Nairobi and other parts of the country. This made the study to be so expensive as it involves a lot of travelling. Further, most firms have shifted from their former head office. This made it difficult to trace the new head office.

5.3 Suggestions for Further Research

Areas of management of marketable securities needs to be researched further.

Further research can be done on the strategies regarding marketable securities holdings.

It could still be done on the internal control to find the internal controls available so as to minimize the problem of conflict of interest.

Further research can also be done on the use of marketable securities by firms not listed at NSE.

It could be done on the use and understanding of marketable securities by individuals like retirees, employees and so on.

Still it can also be done on the hedging of exchange rate exposure of marketable securities. This is because many firms are affected by exchange rate risk

Finally further research can be on the pros and cons of each of marketable securities available to the firms.

APPENDIX 1 - QUESTIONNAIRE

SECTION A

1. Does your company make any investment in marketable securities?

(Marketable securities are those securities whose maturities are less than 1 year)

- Yes No

2. In which industry are you and what products do you produce?

Industry _____ Product _____

3. How important are the following reasons to you in deciding to invest in marketable securities?

Not Slightly Moderately Very Extremely
Important Important Important Important Important

- | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) To finance known expenditure | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Cushion firm against unexpected cash needs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Earn income on cash not so soon needed | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) All the above three alternatives | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Others (specify) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. For your answer to question 3 above, which securities do you invest into?

Reasons	Group 1				Group 2						
	Treasury Bill	91 day Treasury Bond	Commercial Paper	Certificate of Deposit	1 Yr Bond	1½ Yr Bond	2 Yr Bond	3 Yr Bond	4Yr Bond	5 Yr Bond	6Yr Bond
To:											
a) Finance known Expenditure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cushion firm against unexpected cash needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Earn income on cash Needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) All the above three Alternatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Others (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION B

5. How important are the following factors to you when investing in marketable securities?

Not Slightly Moderately Very Extremely
 Important Important Important Important Important

- | | | | | | |
|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Yield | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Term to Maturity | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Risk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Taxes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Others (specify) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

6. For the above factors considered when investing in marketable securities, match it against the securities given below: Treasury Bills, Treasury Bonds, Commercial Paper, Certificate of Deposit: 91 days; 1 year; 1½ years; 2 years; 4 years; 5 years; 6 years; Others (specify).

Factors considered	Securities held
Yield (return)	
Term to Maturity	
Risk	
Taxes	
Others (specify)	

SECTION C

1. What is the firm's amount of cash generated in 2002 (Cash includes Cash in Hand and in Bank Account)?
2. How much of this do you invest in securities?
3. Of cash allocated for investment, how much do you invest in the following securities?

SECURITIES	AMOUNT
------------	--------

GROUP 1	
Treasury Bills Commercial Paper Certificate of Deposit Treasury Bonds: 91 days Group 2 Treasury Bonds: 1 year; 1½ years; 2 years; 3 years; 4 years; 5 years; 6 years; Others (specify)	

4. What is the Cashflow Pattern of the Firm?

- Uncertain
- Certain
- Others (specify)

5. How important is the following to you in determining the amount of investment into the society?

Not Slightly Moderately Very
Extremely.

Important Important Important Important Important

- a) Methods of Management towards risk
- b) Risk of illiquidity
- c) Certainty regarding magnitude and timing of cash flows
- d) Trade off between risks and consistent with firm needs
- e) Others (specify)

6. Does your firm have separate specialized management who are responsible for investment?

Yes No

If your answer to No. 6 is yes, which department is it?

7. What is the level of education of this management?

University Level Diploma Level Others (specify)

8. Does your company borrow when funds are needed?

Yes No

9. If yes, how does your firm regard borrowing cost?

- Certain
- Uncertain
- Others (specify)

10. Do you pay interest on these borrowings/

- Yes
- No

11. If yes, is the interest rate predictable?

- Yes
- No

APPENDIX 2 - COMPANIES QUOTED AT NAIROBI STOCK EXCHANGE (NSE) AS

AT 3RD MARCH, 2003

MAIN INVESTMENT MARKET SEGMENT

AGRICULTURAL

Brooke Bond Limited

Kakuzi Limited

Rea Vipingo Plantation Limited

Sasini Tea & Coffee Limited

COMMERCIAL AND SERVICES

African Lakes Corporation PLC

Car & General (K) Limited

CMC Holdings Limited

Hutchings Biemer Limited

Kenya Airways Limited

Marshalls (E.A.) Limited

Nation Media Group

Tourism Promotion Services Limited

Uchumi Supermarkets Limited

FINANCE AND INVESTMENT

Barclays Bank Limited

C. F. C. Bank Limited

Diamond Trust Bank Kenya Limited

Housing Finance Company Limited

I.C.D.C. Investments Company Limited

Jubilee Insurance Company Limited

Kenya Commercial Bank Limited

National Bank of Kenya Limited

NIC Bank Limited

Pan Africa Insurance Limited

Standard Chartered Bank Limited

INDUSTRIAL & ALLIED

Athi River Mining
B.O.C. Kenya Limited
Bamburi Cement Limited
British American Tobacco Kenya Limited
Carbacid Investments Limited
Crown Berger Limited
Dunlop Kenya
E.A. Cables Limited
E.A. Portland Cement Limited
East African Breweries Limited
Firestone East Africa Limited
Kenya Oil Company Limited
Mumias Sugar Company Limited
Kenya Power & Lighting Company Limited
Total Kenya Limited
Unga Group Limited

ALTERNATIVE INVESTMENT MARKET SEGMENT

A. Baumann & Company Limited
City Trust Limited
E.A. Packaging Limited
Eaagads Limited
Express Limited
Williamson Tea Kenya Limited
Kapcharua Tea Company Limited
Kenya Orchards Limited
Limuru Tea Company Limited
Standard Newspapers Group

FIXED INCOME SECURITIES MARKET SEGMENT

Kenya Hotels Limited

Kenya Power & Lighting Company Limited

Kenya Power & Lighting Company Limited

APPENDIX 3 – COMPANIES WHO RESPONDED TO THE QUESTIONNAIRE

Brooke Bond
Kakuzi
Rea Vipingo
Sasini
CMC
Nation
Barclays
Diamond Trust
CDC
Jubilee
KCB
NBK
Panafric
Stanchart
Bamburi
E.A. Breweries
Firestone
Kenol
Williamson
Kapchorua
Standard Newspapers

APPENDIX 4 – SUMMARY OF THE RESPONSES IN CODED FORM

ANALYSIS SHEET FOR LISTED COMPANIES ON USE OF MARKETABLE SECURITIES IN

SNO	CO NAME	IIMS	IND	PRO	DFKE	DCFUC	DEIC	DALL	DOTHER	1BY	1BTTM	1BR	1BT	IBOTHER	4CFP	5MMR	5RILL	5CRM
1	Brookebond	1	Agriculture	Tea	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2	Kakuzi	1	Agriculture	Coffee	0	0	0	0	0	0	0	0	0	0	1	0	0	0
3	Rea Vipingo	1	Agriculture	Sisal	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4	Sasini	1	Agriculture	Tea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	CMC	1	Motor	Vehicle	0	0	0	0	0	0	0	0	0	0	1	0	0	0
6	Nation	0	Media	Newspaper	1	2	4	0	0	4	4	5	1	0	0	4	5	4
7	Barclays	0	Banking	Services	0	4	0	4	0	4	4	4	4	0	2	4	5	3
8	Diamond Trust	0	Banking	Services	5	5	5	5	0	5	5	5	0	0	0	5	5	5
9	CDC	0	Finance	Services	4	5	4	4	0	5	5	5	4	0	0	5	5	4
10	Jubilee	0	Insurance	Services	5	5	5	5	0	5	5	5	4	0	0	4	4	4
11	KCB	0	Banking	Services	1	4	4	0	0	4	4	4	1	0	0	4	4	4
12	NBK	0	Banking	Services	4	3	5	4	0	5	4	5	4	0	0	4	4	4
13	Panafric	0	Insurance	Life Assurance	5	5	5	5	0	5	5	5	4	0	0	1	4	4
14	Stanchart	0	Banking	Services	2	4	4	3	0	5	5	5	3	0	1	4	5	5
15	Bamburi	1	Manufacturing	Cement	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	EA Breweries	0	Manufacturing	Beer	4	5	3	4	0	5	4	5	4	0	0	5	5	5
17	Fire Stone	1	Manufacturing	Tire	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Kenoiil	0	Petroleum	Oil	4	5	1	0	0	5	5	1	0	0	1	1	4	4
19	Williamson	0	Agriculture	Tea	2	4	5	0	0	5	4	0	0	0	2	1	4	5
20	Kapchorua	0	Agriculture	Tea	2	4	5	0	0	5	4	0	0	0	2	1	4	5
21	Std Newspapers	1	Printing	EA Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0

KEY:

IIMS - INVESTMENT IN MARKETABLE SECURITIES

IND - INDUSTRY

PRO - PRODUCT

DFKE - DECISION TO FINANCE KNOWN EXPENDITURE

DCFUC - DECISION TO CUSHION FIRM AGAINST UNEXPECTED CASH.

DEIC - DECISION TO EARN INCOME ON CASH.

DALL - DECISION ALL ABOVE THREE ALTERNATIVES.

DOTHER - DECISION OTHERS.

1BY - YIELD

1BTTM - TERM TO MATURITY.

1BR - RISK

1BT - TAXES.

1BOTHERS - OTHERS.

4CFP - CASH FLOW PATTERN.

5MMR - METHODS OF MANAGEMENT TOWARDS RISK

5RILL - RISK OF ILLIQUIDITY.

5CRM - CERTAINTY REGARDING MAGNITUDE AND TIMING OF CASH FLOWS

5TRP - TRADEOFF BETWEEN RISK AND PROFITABILITY

6SM - SPECIALISED MANAGEMENT.

8LE - LEVEL OF EDUCATION.

9BF - BORROWING WHEN FUNDS ARE NEEDED

10BC - BORROWING COST.

11I - INTEREST.

12IP - INTEREST PREDICTABILITY

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