RELATIONSHIP BETWEEN TRADE CREDIT AND VALUE OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY

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D61/61770/2010

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER IN BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS UNIVERSITY OF NAIROBI

NOVEMBER 2013

DECLARATION

STUDENT'S DECLARATION

This research Project is my original work and has not been presented for Award of Degree in any other university.

Signed …………………………………… **Date** ………………………………………………

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SUPERVISOR DECLARATION

This research project has been submitted for examination with my approval as the candidate's University Supervisor.

Signed ………………………………… **Date** …………………………………………..

LECTURER: Mr. JAMES NG'ANG'A

DEDICATION

This work is firstly dedicated to my Mum who have been my constant source of inspiration for

bringing me up and secondly to my late Father who instilled drive and despline to tackling any task

with enthusiasm and determination.

ACKNOWLEGEMENT

ABSTRACT

Trade Credit can be applied by firms to increase sales volumes and thus profitability. However, it can lead to liquidity problems if not efficiently managed. The purpose of this study was to establish the relationship between trade credit and value of firms listed at the Nairobi Securities exchange. Panel secondary data was collected from published Financial statements at Nairobi Securities Exchange and Capital Markets Authority for period between 2009 to 2012. The study used descriptive correlation research design on a sample of 39 Non-Financial Firms listed at the Nairobi Securities Exchange to study the relationship between the two Variables. Regression Analysis was used to determine the relationship and found an inverse and insignificant relationship between the investment in accounts recievables and the Value of Firm.This implies that the increase in profits as a result of trade credit use in boostering sales is later Negated by the associated Trade Credit risks and costs and therefore the Negative effect to value of Firm. This further confirms that accounts recievables entail both costs and confer benefits.The study established that Size of firm and Leverage greatly influenced the Value of Firm and Commented on the need by investors to pressure their firms to limit trade credit granted so as to mitigate the opportunity cost, financial risk, and reduction in profitability and liquidity while also encouraging managers to maintain an investment in accounts receivable which maximizes operational, financial, and commercial benefits.

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LIST OF ABBREVIATIONS

ADR American Depository Receipt

ANOVA Analysis of Variance

AR   Accounts Receivable

ASA   American Society of Appraisers

CCF   Capitalized Cash Flow

CDS   Central Depository System

CF   Cash Flow

CMA   Capital Markets Authority

DCF   Discounted Cash Flows

ROA   Return on Assets

RPED   Regional Program on Enterprise Development

SIC   Standard Industrial Classification

SME   Small and Medium Enterprises

WACC Weighted Average Cost of Capital

WIRC   Western India Regional Council

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Trade Credit is one of the many factors that can be used by a firm to influence demand for its products. According to Horne and Wachowicz (1998), firms can only benefit from credit if the profitability generated from increased sales exceeds the added costs of receivables. Myers and Brealey (2003) define trade credit as a process whereby possession of goods or services is allowed without spot payment upon a contractual agreement for later payment.

Ferris (1981) consider trade credit as a particular type of short-term loan, which is tied in both timing and value with the exchange of goods. Trade credit plays an important role in corporate financing policy. From the seller's point of view, the investment in accounts receivable is an important element in a firm's balance sheets. Specifically, in European countries, the level of trade debtors represents on average a quarter of total assets (Giannetti, 2003). Kimutai (2006) asserts that, accounts receivables account for a big proportion of assets in businesses averaging 15% to 20% of the total assets of a typical business.

Given the significant investment in accounts receivable by most firms, the choice of credit management policies could have important implications for the value of the firm (Pike and Cheng, 2001). Many entities face liquidity and inadequate working capital problems due to lax credit standards and inappropriate credit policies. According to Pike and Neale (1999), a sound

credit policy is the blueprint for how the company communicates with and treats its most valuable asset, the customers.

Trade credit should be more important than bank credit when creditor protection is weaker, because cash is easily diverted, while inputs are more difficult to divert, and inputs illiquidity facilitates trade credit (Burkart and Ellingsen, 2004). Kohler, Britton, and Yates (2000) show that there is a "trade credit channel" that offsets the "bank credit channel" of monetary policy.

Demirguc-Kunt and Maksimovic (2002) found that trade credit is relatively more prevalent in countries with weaker legal protection (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 1998). Gakeri (2011) Asserts that the legal framework on capital market in Kenya is characterized by gaps, overlaps, duplication, inconsistencies and most importantly, restrictions on investment.

Financial disintermediation in Kenya has not been fully achieved despite the regulatory policy as a driver for growth in capital markets (institute of economic affairs, 2002).This explains increased use of trade credit in Kenya as banks continue to play a central role in institutional financing. Kadet (2005) Noted that Kenya has a relatively well developed Banking and formal financial sector. Maksimovic (2002) suggest, firms operating in countries with more developed banking systems grant more trade credit to their customers, a case in Kenya.

1.1.1 Trade Credit

Trade credit is as old as commerce; its practice is world-wide. It is an arrangement between a buyer and seller by which the seller allows delayed payment for its products (Mian and Smith, 1992), instead of cash payment. According to Lee and Stowe (1993), it is part of a joint

commodity and financial transaction in which a firm sells goods or services and simultaneously extends credit for the purchase to the customer. Trade credit plays an important role in firm financing policy. For the buyer, it is a source of financing through accounts payable, while for the seller, trade credit is an investment in accounts receivable. This study focuses on the supply side of trade credit.

Patsula (2001) suggests that organizations can classify trade credit into three broad categories depending on its characteristics and properties. The first category is open credit which is open account or regular credit. This is where organizations extend short term credit to its customers without any requirement for a down payment and without charging any interest or carrying charges. It is the most common type of credit and is usually payable within thirty days or at the end of the month. The second category is option-terms credit. This is where organizations allow credit to their customers up to a certain limit and payments due within thirty days of billing without a penalty. However, the company can assign a carrying charge to amounts due and not paid within that time period and release additional credit up to the preset agreed limit. The last category is the revolving charge credit. It is a situation where organizations continuously release credit subject to a certain preset ceiling as payments are being made. It is the common type of business credit in the corporate world where organizations have a long term relationship with their customers.

The literature has explained the use of trade credit based on the advantages for suppliers from the financial, operational and commercial perspective. Some motivations for trade credit include mitigating customers' financial frictions (Meltzer, 1960); reductions in transaction costs (Ferris, 1981; Emery, 1987); stimulation of sales in slack demand periods by relaxing the credit terms

(Emery, 1984); reductions in information asymmetry between buyer and seller (Smith, 1987; Long et al., 1993; Pike et al., 2005), because trade credit acts as a signal for product quality (Lee and Stowe, 1993; Emery and Nayar, 1998); a mechanism of price discrimination between cash and credit customers (Brennan, Maksimovic and Zechner, 1988;Petersen and Rajan, 1997). Finally, credit provision might improve the supplier-customer relation (Ng, Smith and Smith, 1999; Cuñat, 2007). Consequently, granting trade credit enhances a firm's sales.

1.1.2 Value of Firms

The value of a firm is the present value of the firm's current and future profits (Michael R, 2006). According to Michael, the value of firm is linked to profit maximization; a firm looking to maximize their profits is actually concerned with maximizing its value. Damadoran (2002) asserts that, the value of the firm is obtained by discounting expected cash flows to the firm. Accordingly, the value of firms is the present value of expected cash flows from both the assets in place and the likely future growth, discounted at the cost of capital.

Dalborg (1999) identified three fundamental drivers of value creation. These are profitability, growth, and free cash flow. According to him, normally the value of a company is determined by its current profitability, expectation for profit growth and he added also that free cash flow could be considered to be a determinant of value in certain situations.

According to Rappaport (1998) there are seven critical value drivers in determining the value of any business: sales growth, operating profit margin, incremental fixed capital investment, incremental working capital investment, cash tax rate, cost of capital and value growth duration. However, he mentioned that for the operating decisions these factors are broad and in order to be

useful there is a need to determine the micro value drivers that influence the above seven-macro value drivers. This means that the manager needs to set micro value drivers at the business unit level.

According to Copeland et al (2000) value is created in the real market by earning a return on the investment greater than the opportunity cost of capital. Thus the more you invest at a return above the cost of capital the more value you create. This implies that growth creates more value as long as the return on the capital exceeds the cost of capital. They go on to mention that one should select the strategies that maximize the present value of expected cash flows or economic profits. The returns that shareholders earn depend primarily on changes in the expectations more than actual performance of the company.

Dalborg (1999) pointed out that value is create created when the returns to shareholder, in dividend and share-price increases, exceed the risk adjusted rate of return required in the stock market (the cost of equity). He said that the total shareholder return must be higher than the cost of equity to truly create value.

1.1.3 Relationship between Trade Credit and Value of Firm

The financial goal of any business firm is to maximize the value of the firm or shareholders wealth (Berle and Means, 1932). Trade credit helps firms to further this goal since it increases the level of investment in accounts receivables and, therefore affects the profitability and liquidity of the company .However, trade credit is costly and involves an opportunity cost (Nadiri, 1969; Oh, 1976). It also involves bearing the credit risk, due to the exposure to payment default, so granting trade credit may have negative effects on profitability and liquidity because of debt defaults

(Cheng and Pike, 2003). Also, extending trade credit leads the seller to incur some additional administrative costs (Mian and Smith, 1992), due to costly credit management activity.

Thus, a firm's accounts receivable level can be viewed as being determined by a trade-off between costs and benefits of trade credit granted. The firm balances the benefits of credit granted against the various costs of holding large accounts receivable. Actually, Nadiri (1969) developed a model to select the optimal trade credit in order to maximize net profit. Afterwards, Emery (1984) established that there is an optimal level of accounts receivable when the marginal revenue of trade credit lending equals the marginal cost, and this condition produces an optimal credit period.

The purpose of this study was to analyze the effect of trade credit policy on firm value. It is expected that financial, operational and commercial benefits for trade credit results at lower level of receivables, while opportunity and financing costs as well as credit risk dominate at higher levels of receivables. Accordingly, this study will establish a non linear relationship between trade credit and the firm value; therefore, an implication for researchers and managers is that management of trade credit is an important element which affects shareholder value.

In order to do this, firms listed at the Nairobi Securities exchange were selected for study. These firms will be used because of the great importance of trade credit in Kenya, Anders Isaksson (2002). The importance of trade credit in Kenya could be explained by the characteristics of the financial and legal system of the country.

1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange is an organized market where stock and shares are issued, bought and sold through the services of stockbrokers or dealers. It is the market where Institutional and retail investors can buy and sell securities i.e. equity and debt securities.

Nairobi stock Exchange was constituted in 1954 as a voluntary association of stockbrokers in the European community registered under the Societies Act. Before then, dealing in shares and stocks started in the 1920's when the country was still a British colony (NSE, 2013).However the market was not formal as there did not exist any rules and regulations to govern stock broking activities.

The market has since evolved over the years from being informal market dominated by foreigners to self regulatory system by local investors in post independent government and to structured institution as a result of institutional and policy reforms which saw formation of Capital market Authority (CMA) in 1990 as a regulator and subsequent installation of the Central Depository System (CDS) in 2000 to speed up the share trading and transactions (Rose, W.2003)

Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited in July 2011. The change of name reflected the strategic plan of the Nairobi Securities Exchange to evolve into a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments (NSE, 2013).

Some of the functions of NSE includes; Enables mobilization of savings for investment in productive enterprises as an alternative in putting savings in bank deposits, real-estate investment or outright consumption. Secondly, it gives room to the growth of related financial services sector

e.g. insurance pension schemes, which nurture the spirit of savings. Thirdly, it permits the owners of capital to "divorce" from managing their capital. This is a very crucial process because the owners of capital may not necessarily have the expertise to manage the capital investment efficiently. It also allows public disclosure that gives effective efficiency in the capital growth process. It facilitates equity financing. Equity financing is preferred to debt financing. Most countries, both developed and undeveloped, have been trying to do away with debt financing especially during recessions. It enhances improved access to finance both to new and small companies, which might otherwise find it hard to access finance. It enables futuristic funding in most of the developing countries, where venture capital in mostly unavailable. And finally, it encourages public floatation of private companies, which in turn allows greater growth. This is an asset that is available for long term investments.

The performance of the stock market indicates that the market has not managed to make significant contribution to financing economic growth (Ngugi, Amanja and Maana, 2009). They further points out that "while there are about 59 Companies listed in NSE, not all of them are in a financially sound position".

1.2 Statement of the Problem

Trade Credit can be applied by firms to increase sales volumes and thus profitability of the firm. With efficient credit management practices in the firm, the resulting increase in accounts receivables as a result of high sales volumes is expected to improve the cash flow and liquidity in the firm. Myers and Brealey (2003) suggest that it is imperative for almost all business entities, irrespective of industry, to offer credit in order to survive. However they contend that though this

increased sale is advantageous to growth and expansion of market share, it is associated with credit and administrative costs which affect cash transactions to a lesser extent. According to Scheufler (2002), risk management and improvement of cash flows are very challenging in today's business environment. With the rise in bankruptcy rates, the probability of incurring losses has raised as a result of payment default by the affected firms. Economic pressures and business practices are forcing organizations to slow payments while on the other hand resources for credit management are reduced despite the higher expectations.

The Nairobi securities Exchange has a responsibility for development and regulation of the market operations to ensure efficient trading. As a market where quoted companies trade in shares, the public has got interest in knowing the market value of the firms in which they have invested. The companies listed in NSE are expected to be financially health so as to ensure economic growth of a country. This study is motivated following many corporate failures in the Kenyan capital market and those that have gone in to receivership, only a handful of companies have managed to come of it in financial health.

The study by Anders isaksson (2002) on trade credit for manufacturing firms in Kenya found that, trade credit constituted an important part of Kenyan firms' loan portfolios. Other findings where that firm size, promotional activities, the formal status of the firm, demand conditions, and the short and long-term external financing position were important explanatory factors behind the probability of obtaining trade credit. In order to reveal the importance of Credit Policy to firm's liquidity, Mwololo (2011) conducted a study to establish the relationship between Credit policy and liquidity for oil manufacturing firms in Kenya and his finding confirmed that a linear relationship existed.

Mburu (2009) dwelt on the determinants of trade credit use by SME's in Kenya and found that the main determinant was finance related, while internationally, studies that sought to link the trade credit and value of firm included; Cristina and Pedro (2007) who studied trade Credit policy and firm value in Spain and established a quadratic relationship between the investment in accounts receivable and firm value, and secondly the study by Hill et al. (2010) who investigated on shareholder returns from Supplying Trade Credit in New York and found a positive relation between shareholder wealth and investment in accounts receivables.

From the above, it is apparent that none of the studies in Kenya has ever attempted to investigate the link between trade credit and value of firm. In this study, therefore, the researcher set to fill the missing knowledge gap by examining the relationship between trade credit and value of firms with specific focus on the firms listed at the Nairobi securities exchange.

1.3 Objective of the Study

To establish the relationship between trade credit and value of firms listed at the Nairobi securities exchange.

1.4 Value of the Study

The study will be useful to various stakeholders in making key decisions relating to investment, operation and regulation of the business. It will specifically enlighten the market players on how to manage trade credit and improve the firm value.

Through the analysis of the relationship between trade credit and the value of firm, the study will show the effect of the trade credit to shareholders net wealth thereby enabling shareholders to decide on where to invest and whether or not to ratify trade credit decisions in their firms.

The management will be provided with a tool for managing key business processes in an efficient way. In particular finance, sales & marketing and operations departments will guided on trade credit practices that supports Cash flow generation for achieving the value maximization goal.

Investors prospecting to start new business will be provided with a tool for coming up with business model that will maximize their investment. They will be provided with the knowledge for analysis in identifying the best company to invest by looking in to their trade credit policies.

The study will be also useful to employees in that it will help them to contribute in drafting and implementation of trade credit policy that guarantees the revenue growth, liquidity and profitability. As a result their individual interests for job security and personal career growth will be enhanced by having a profitable firm.

The government agency will be provided with guideline to control and regulate the operations of the companies by coming up with the trade credit policy framework for adoption by the companies. Specifically, Capital markets Authority and Nairobi securities exchange will be assisted in rolling out trade credit policy direction to market players at the interest of not only the shareholder's but to the entire economy.

The study contributes to the body of knowledge on trade credit and provides the basis for further research on effect of the trade credit to the value of firm.

CHAPTER TWO

LITERACTURE REVIEW

2.1 Introduction

This chapter reviews literature relevant in this study. It highlights and defines theories of trade Credit and measures of firm value.

2.2 Theoretical Review

There are several motivations for giving and taking trade credit as are observed empirically but till recently no attempt was made to develop theories of trade credit. Only during the last three decades there have emerged a number of trade credit theories. Trade credit can be justified by the following five motives: the Liquidity motive, the transaction motive, the pricing motive, the sales-promotion motive, and the verification motive.

2.2.1 Transaction Cost Theory

The transaction motive rests on the simplification of payment induced by trade credit. Ferris' Transaction Theory (1981) postulates that trade credit use brings down exchange costs. This theory holds that when transactions between sellers and buyers are frequent both parties may reduce transaction costs by agreeing to a periodical payment schedule. The purpose here is not financing but reducing transaction costs. This work so long as saving in transaction costs remains more than the cost of holding receivables.

Mian and Smith (1992) found that when supply of goods and credit are made from one point there is an overall reduction in costs and increase in efficiency as both the monitoring of supplies

and the credit could be done from the same point. Sellers in general, but more particularly those having large inventory, can save on warehousing and related costs by effecting sales with attractive credit terms. This is possible when marginal cost of holding inventory is greater than the cost of holding receivables. Firms whose product suffers from high demand fluctuations may resort to trade credit, which is found to be the least cost solution, the others being adjustment of production schedule or effecting price reduction. The seller could relax credit terms when the demand is slackening and tighten them when demand shows an upswing. This hypothesis of Emery (1987) found support in the empirical findings of Long, Malitz and Ravid (1993) who concluded that firms with high variable demand extend more credit than firms enjoying demand stability.

Some writers suggest that by offering trade credit suppliers can defer tax payment or benefit from tax shields in the short run Mian and Smith (1992), When buyers and sellers are in different tax brackets, cost of financing is also different, other things remaining constant. A firm in high tax bracket has lower net interest cost than a firm in low tax bracket. Hence, the former has an incentive to offer trade credit to save on marginal tax (Brick, L.E. and Fung, W.K.H,1984).

Different dimensions of Costs theory suggest that trade credit is an operational tool to reduce various costs. One of the main criticisms of Costs theory relates to the incentive of settling payments periodically to reduce transaction costs. It might have been valid till 1980s but with the revolutionary improvement in information and payment technology during the past two decades transaction cost has come down so much that this incentive is withered away. When such is the case, the level of trade credit should have come down during this period but in reality this has not happened.

The advantage of saving on warehousing costs by effecting credit sales may not be available when there is a general fall in the demand of the product; the buyers would not be too willing to pick up goods which may remain unsold.

The other criticism is that it is difficult to practice variable credit policy in tune with variable demand. Market may react strongly against such a policy, as it generally prefers a uniform policy. The problem with tax incentive is that it has a very restricted application. Firms belonging to a given industry with tax bracket below the industry average cannot benefit from this. Moreover, it does not explain why trade credit exists between firms belonging to the same tax bracket.

2.2.2 Pricing Theory

When the supplier uses credit terms in order to discriminate among clients, the pricing motive pricing motive is a relevant explanation for trade credit. Here, Trade credit can be viewed as part of the firm's pricing policy designed to stimulate demand. Firms may extend the credit period or increase the cash discount, thus reducing the price of stimulating sales (Pike et al., 2005), so allowing firms to practice price discrimination.

Similarly, Brennan et al. (1988) pointed out that vendor financing enables price discrimination between cash and credit customers. These authors also argue that vendor financing can be used to reduce competition since some firms can concentrate on the credit market while other firms maintain a larger market share in the cash market

This theory is based on the assumption that when market is highly competitive sellers have to resort to non-price competition strategy to increase sales (Soufani, K., 2002). As buyers are

heterogeneous, it calls for charging different prices to different customers. But there are both market and regulatory restrictions to practice such price discrimination. Besides, management of discretionary price-cuts is costly. Trade credit can overcome these restrictions while successfully discriminating prices. Market power of firms can be enhanced considerably by practicing price discrimination through offering of trade credit. This becomes evident when an aggressive manufacturer attempts to occupy shelf-space of the traders in a bid to capture more market share. Mostly, firms enjoying high price-cost margin are found to resort to price discrimination through trade credit offerings.

The difficulty with Price Discrimination theory is that trade credit terms typically follow industry practice. Any attempt to alter an established practice is not viewed kindly by the market. Hence, trade credit as an alternative more of price discrimination can be used selectively and for limited purpose only. Besides, customers who have low default risk and, therefore, can obtain institutional finance at better terms may not be willing to accept trade credit so offered because implicit cost of trade credit is considerably higher than institutional finance. Hence, the offer is attractive only to high-risk marginal customers whose access to institutional finance is prohibitively costly. This raises the incidence of bad debts.

Existence of higher price-cost margin as an incentive to provide trade credit for price discrimination has not been found to have any effect on firms with credible principal customers. The logic behind this is that as firms direct a significant portion of their supplies to large principal customers, quality of the remaining pool also improves. As a result, the incentive to price discrimination wanes away. The focus is shifted to matching of short-term liabilities with short-term assets for both the suppliers and buyers (Banerjee, S.; Dasgupta, S. and Kim, 2004).

2.2.3 Liquidity Theory

If the supplier of goods has better access to finance than the client has, or when the client hesitates to use the limited finance it can access in order to finance inventories, trade credit can be financially motivated (also called the liquidity motive). This is oldest view of trade credit in that it is type of financing made available by the seller to the buyer (Emery, 1987). Thus, trade credit can be viewed as a substitute for institutional financing. According this theory, suppliers have several advantages over financing institutions in offering trade credit to buyers. One such advantage is that the suppliers being in close contact with the buyer is in a superior position not only to evaluate credit worthiness of their customers but also to monitor them almost on a day-to-day basis. The second advantage is that supplies have more effective and quicker ways of liquidating assets of defaulting buyer-firms than institutional financiers.

Following Cuñat´s (2007) reasoning, granting trade credit, especially when customers experience temporally liquidity shocks that may threaten their survival, could reinforce the supplier-customer relation. Recent research (Kestens, Van Cauwenberge, and Bauwhede, 2011) finds that the negative impact of financial crisis on firm profitability is reduced for firms that have increased their trade receivables during the crisis period. This supports the idea that trade credit mitigates customers' financial frictions (Meltzer, 1960). Furthermore, trade credit can be viewed as a strategic investment in seeking to retain customers, in this sense trade credit acts as a signal to the customer that the supplier seeks a mutually beneficial longer-term trading relation (Cheng and Pike, 2003).

This theory is based on "buyer opportunism" which was first noted by Petersen and Rajan (1997) and further evidenced by Wilner (2000). When a supplier cannot credibly threat to stop supplies e.g., when he is in financial distress, the buyer is found to pay less promptly. This opportunistic behavior is more manifest when the buyer is one of the principal customer; the supplier simply cannot afford to make such threats. Indeed, as Wilner observed, majority of suppliers cannot even charge late payment penalty and even those firms which invoice the penalty half of them could not collect it. This is true across countries belonging to both the developed and developing world. Besides delaying payment, buyers also extract several other concessions, e.g., larger discounts, from the suppliers in financial distress.

Evans(1997) found that suppliers (trade creditors) desiring to maintain enduring product market relationships are found to grant more concessions to a customer in financial distress, as compared to similarly positioned lending institutions. Wilner (2000) also found that if the degree of dependence of the supplier on the customer is high, the customer in financial distress obtains larger concessions in renegotiation of credit terms.

On the other side of the market there also exists "seller opportunism" the major source of which is the monopoly supplier power. The supplier firm has an incentive to keep the buyers (debtors) dependent on it in order to hold and expand the market share and, also to later squeeze them when they are brought to fold. Petersen and Rajan (1997) showed that such suppliers initially 'aid' small businesses by offering "teaser rates" (competitively relaxed credit terms) to lure them to their fold and subsequently earn larger profits by charging higher rates. At that time it would be difficult for the buyers to switch over to other suppliers. However, if the suppliers are small there exists the "free-rider problem" which aggravates financial distress of the suppliers, particularly

those that sells to many customers. Each debtor being small would feel that prompt payment of the small amount of debt would not have much effect on the firm in financial distress. Rather, if he delays the payment and, in the meantime the firm goes bankrupt, he can avoid the payment altogether.

Although "buyer opportunism" generally holds, Petersen and Rajan (1997) found evidence of principal customers mitigating financial distress of their suppliers by paying more promptly, especially when they have a long-term stake in the relationship.

2.2.4 Sales Promotion Theory

The sales promotion motive (Nadiri, 1969) rests on two arguments; first, a supplier may want to offload some of his excess inventories onto clients. To be able to persuade the clients of the idea (to transfer costs of inventory onto the clients) the supplier may allow for later payment. Furthermore, suppliers may allow for trade credit to gain a competitive edge over competitors.

The basis of this theory is that trade credit is similar to other sales promotion tools like advertising, to differentiate a product from competition. Trade credit is considered here as long-term investment like advertising, to help maintain long-term relationship with customers, and again like advertising, it generates income over time. Nadiri (1969) was the first to use this concept. He showed that like advertising, trade credit is a non-price variable that influences product demand through differentiation. He found that optimal ratio of trade credit to sales is directly proportional to the elasticity of demand for the product with respect to trade credit and inversely proportional to price elasticity of the product. As optimal profit margin is inversely related to price elasticity, the trade credit to sales ratio is positively related to profit margin. This

is consistent with the findings of Bernan et al (1988) that Accounts receivable is positively related to the supplier's price-cost margin.

Blazenko and Vandezande (2003) extended the work of Nadiri to examine the interplay of profit and trade credit. In their model they hypothesized that when price elasticity of a product is constant elasticity of trade credit may influence demand. Depending on the economic environment profit margin may either fall or rise when marginal cost rises. For example, a firm may increase product price when marginal cost rises but as a consequence sales might fall because of constant price elasticity of the product. But the firm may arrest such decline in sales by increasing trade credit. They also observed that when elasticity of demand of the product with respect to trade credit is high more lenient trade credit policy greatly increases the product demand.

2.2.5 Verification Theory /Quality Guarantee Theory

Finally, there is the verification motive, which simply means that the client needs time to verify the quality and quantity of the goods delivered before paying for the goods .Trade credit reduces the information asymmetry between buyer and seller (Smith, 1987; Long et al., 1993; Pike et al., 2005) alleviating moral hazard problems between the firm and their customer, since it allows the customer to verify product quality before paying. This is especially relevant for products or services that take longer to verify (Smith, 1987). Trade credit is employed by the vendor firm to signal for product quality (Lee and Stowe, 1993; Emery and Nayar, 1998). Trade credit can also be interpreted as an implicit quality guarantee (Lee and Stowe, 1993; Long et al., 1993; Deloof

and Jegers, 1996). In this sense, trade credit is used by firms' customers as a device to manage and control the quality of the items purchased (Smith, 1987; and Long et al. 1993).

This theory is based on asymmetry of information between buyer and seller. The buyer does not know the quality of the product he is buying. If he pays cash on delivery and the product turns out to be of poor quality, he ceases to have effective control over an errant supplier-- he loses the cash and the product as well. In other words, if the buyer cannot insure himself against malfunctioning of the product, he will discount the value he expects to gain from the purchase with his estimation of the risk factor. Hence the more risky the product, the lower is the expected value of the purchase (Horen, 2007). Firms do offer warranties or even money-back guarantees. But enforcement of such warranties or even money-back guarantees often takes a long time during which period the buyer is deprived of the service of the product while his money is blocked. The seller may also be out of business by the time the defect in the product gets ascertained. If the buyer is a reseller, he may not get payment against such sale; most likely goods will be returned to him. When the product is an important input for a manufacturer the entire production process may stop or low quality finished products may come out from the process. Hence normal desire of buyers of products whose quality is uncertain is to pay only after the quality is ascertained. Trade credit is an effective tool to take care of such anxiety. If the product does not perform the buyer simply does not pay. Smith (1987) also found that it is often the sellers who offer trade credit to enable the buyers to verify product quality before making payment. Long, Malitz and Ravid (1993) also held that if the quality of the product cannot be easily verified, trade credit offers an opportunity to do so before making final payment.

Theoretical models argue that there is an optimal trade credit policy (Nadiri, 1969; Emery, 1984), where the optimal level of accounts receivable occurs when the marginal revenue of trade credit is equal to the marginal cost (Emery, 1984). Lewellen, McConnell and Scott (1980) developed a model in which, under competition and certainty, trade credit does not influence firms' market value. Relaxing these assumptions and taking into account the existence of uncertainty, they postulate that in an uncertainty environment, where there will exist the likelihood of default, and where there are costs involved in the credit evaluation process, there could be an effect of trade credit on firm value. Put another way, the existence of market imperfections might impact on the trade credit decision and allow an opportunity for the credit policy to affect firm value, implying an optimal trade credit policy. Cheng and Pike (2003) find that firms operating in competitive markets are forced to offer industry credit terms. Consequently, one might expect a quadratic relationship between trade credit and firm value by a tradeoff between costs and benefits of supplying trade credit, where there is a level of trade credit granted which maximizes firm value.

From an investment perspective, trade credit can generate an implicit interest income for Delayed payment if the seller can charge a higher price by offering credit terms. Firms should invest in trade credit if the net present value of the revenue receivable with trade credit is greater than the net present value without it (Ferris, 1981).

As a result of these benefits, we can expect a positive relationship between receivables and value. However, investing in accounts receivable also has costs. On the one hand, granting trade credit exposes the firm to financial risks. The role of firms as liquidity providers implies a risk of late payment and/or renegotiation in case of default and, at worst, an increase in Delinquent accounts. It creates a potential cost of financial distress. According to the European Payment Index Report

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(2011), 1.25% of all bankruptcies are due to late and/or nonpayment of outstanding invoices. Late payment limits firms growth, exposes companies to liquidity problems, and in some cases firms go bankrupt. On the other hand, the granting of Credit on sales requires the firm to forgo funds on which interest could be earned. Nadiri (1969) states that one cost of trade credit is "the carrying cost"; this is the real income Foregone by tying up funds in receivables.

This approach implies an opportunity cost. Also, granting credit forces firms to obtain additional funds from the capital market to fund the extra investment in receivables, thereby increasing their reliance on external funding.

Actually, trade credit granted will depend on the creditworthiness of the supplier and its access to capital markets (Schwartz, 1974; Emery, 1984; Smith, 1987; Mian and Smith, 1992; Petersen and Rajan, 1997).Moreover, extending trade credit leads the seller to incur credit management costs. In particular, the seller must devote some time and energy to assessing the credit risk of the buyer and to structuring the delayed payment contract. The seller must also incur some costs to collect the payment from the buyer. According to Ng et al. (1999), the transaction costs associated with trade credit information and monitoring are incurred when informational asymmetries between buyer and seller are present, reputations are hard to establish, and a high level of specialized investment is involved.

2.3 Measures of Firm Value

Firm value refers to the economic value of an owner's interest in a business (Damodaran, 2002).

2.3.1 Assets-Based Approach

According to this approach, the business is estimated as being worth the value of its net assets. It represents the value of all tangible and intangible assets and liabilities of a company. There are three common ways of valuing its net assets: book values, net realizable values and replacement values (Garrett, 2012).

Book value or net worth is the difference between total assets and liabilities, i.e., the surplus of the company's total goods and rights over its total debts with third parties.

Net realizable values of the assets less liabilities would represent what should be left for shareholders if the assets were sold off and the liabilities settled (Garrett, 2012). However, if the business being sold is successful, then shareholders would expect to receive more than the net realizable value of the net assets because successful businesses are more than the sum of their net tangible assets: they have intangible assets such as goodwill, knowhow, brands and customer lists – none of which is likely to be reflected in the net realizable value of the assets less liabilities.

A replacement value approach uses the replacement value of assets, which is usually higher than the book valuation (WIRC, 2011); replacement value includes not only the cost of acquiring or replicating the assets, but also all the relevant costs associated with replacement. Liabilities are deducted from the replacement value of the assets to determine the net replacement value of the business.

2.3.2 Income-Based Approach

The income approach is a general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods through which anticipated benefits are converted into value (ASA, 2009).

Both capitalization of benefits methods and discounted future benefits methods are used. In capitalization of benefits methods, a representative benefit level is divided or multiplied by an appropriate capitalization factor to convert the benefit to value. In discounted future benefits methods, benefits are estimated for each of several future periods. These benefits are converted to value by applying an appropriate discount rate and using present value procedures.

Stephen (2006) defined Capitalization as the conversion of income into value.

$$\text{Value} = \frac{CFt}{i}$$

Where,

CF = next year's cash flow

i = capitalization rate

t = time

A discounted Cash flow method is often used when the company is expected to have materially different cash flows than it has seen in the past (Garrett, 2012). The DCF is also often used for companies with little or no earnings history.

$$\text{Value} = \frac{CFt}{(1+r)t} \qquad t=1; t=n$$

Where,

n = Life of the asset

CFt = Cash flow in period t

r = Discount rate reflecting the riskiness of the estimated cash flows

A discounted cash flow is a multi-year, or period, calculation of value .Its Discounted Cash Flow basic formula;

$$\text{Value} = \frac{CF1}{(1+K)1} + \frac{CF2}{(1+K)2} + \frac{CF3}{(1+K)3} + \ldots \ldots \frac{CF\infty}{(1+K)\infty} \quad \text{or Value} = \sum_{n=1}^{t} \quad \frac{CFn}{(1+k)n} + \frac{TVt}{(1+k)t}$$

Where,

CF = cash flow

k = discount rate

n = time periods, time = 1 to t

t = time

TV = terminal value

A publicly traded firm potentially has an infinite life and its value is therefore present value of cash flows forever (Damodaran, 2002); therefore the above model is applicable.

There are three paths to discounted cash flow valuation; the first is to value just the equity stake in the business, the second is to value the entire firm, which includes, besides equity, the other claimholders in the firm (bondholders, preferred stock holders, etc.) and the third is to value the firm in pieces, beginning with its operations and adding the effects on value of debt and other non-equity claims (Stephen, 2000). Stephen (2000) adds that, the value of equity is obtained by discounting expected cash flows to equity, at the cost of equity, i.e., the rate of return required by equity investors in the firm.

Value of Equity $= \frac{CFt\ to\ Equity}{(1+ke)t}$ 　　　　　 t=1; t=n ; K_e = Cost of Equity

Value of Firm $= \frac{CF\ to\ Firm\ t}{(1+WACC)t}$

Value of firm = Value of all-equity financed firm + PV of tax benefits +Expected Bankruptcy Costs

2.3.3 Market-Based Approach

According to WIRC (2011), the Market Price Method evaluates the value on the basis of prices quoted on the stock exchange. Average of quoted price is considered as indicative of the value perception of the company by investors operating under free market conditions.

Secondly, market comparable method is, applied in case of unlisted entities (WIRC, 2011). It estimates value by relating the same to underlying elements of similar companies for past years. It is based on market multiples of 'comparable companies'. For example Earnings/Revenue, Book Value Multiples, and Industry Specific Multiples.

2.4 Empirical Studies

Hill et al. (2010) investigated the shareholder Returns from Supplying Trade Credit using a sample that included all non-financial, non-utility, non-ADR, and SIC-classifiable firms covered by Compustat from 1971-2006 in New York .They used the valuation approach of Faulkender and Wang (2006) to estimate the relationship between equity values and trade receivables. The result of the study strongly suggested a significant and positive relation between shareholder wealth and receivables. In overall, the results suggested the importance of supplier financing in enhancing equity value and that the market value impact of receivables depends upon the perceived benefits conferred by this form of financing.

Cristina and Pedro (2007) studied the trade Credit policy and firm value using the dataset comprised of 54 Spanish listed non financial firms for period between 2001 to 2007. Regression analysis was used to determine the casual relationship between trade credit policy and firm value subject to explanatory variables of Size, growth (represented by sales) and leverage. Their Findings was that, there is an inverted U-shaped/quadratic relationship between the investment in accounts receivable and firm value, where a level of trade credit exists at which firm value is maximized. The relation between these variables is positive when the investment in trade credit is low, and it becomes negative for higher levels of trade credit.

The study by Biggs *et al.* (1996) seeks to identify the determinants of access to trade credit using the first survey year (1993) of the Kenyan RPED data. In a Probit model they find that access to trade credit increases with firm size and that it is positively influenced by the owner being of

Asian origin. Another finding is that Asian owners have better access to trade credit than African owners, and only relatively large African firms seem to have access to trade credit.

Mwololo (2011) investigated the relationship between credit Policy and liquidity for oil manufacturing Firms in Kenya using a sample of sixteen oil marketing firms. Regression model was used to analyze the data and findings where that, credit limit affects liquidity positively while debtors collection period and debt write offs affects liquidity negatively therefore a linear relationship existed between the two variables.

Gitonga (2010) studied the relationship between credit risk management and profitability for commercial banks in Kenya using the secondary data obtained from published annual reports for the commercial banks for a period of ten years. Primary data was also used and was collected from a sample of thirty commercial banks through a structured questionnaire; the information was analyzed with the help of descriptive statistics. Both qualitative and quantitative methods were used in order to fulfill the main purpose of the study. A regression model was used to do the empirical analysis. The findings and analysis revealed that credit risk management has effect on profitability in all the commercial banks analyzed.

Mburu (2009) sought to identify the determinants of trade credit use by Small and Medium Enterprises in Nairobi using a descriptive research on sample of 180 SMEs in Kariobangi jua kali light industries. The findings of the study were that the business structure of the sample of study was sole proprietorship, that most sales and purchases by SMEs are on credit and thirdly the SMEs were granted longer credit period by their suppliers than they granted their customers. The study further found that the main determinants of use of trade credit by SMEs are finance related.

2.5 Summary on Literature Review

Trade credit is an essential element of business life for most firms in the world, so important that it even has macroeconomic repercussions. One may imagine that trade credit is even more important in countries where financial markets malfunction, contract enforcement is insecure, and information is scarce, unreliable, and asymmetric. Many Sub-Saharan African (SSA) economies may be described in such a way.

Local studies on the determinants of trade credit confirms the trade Credit theories through findings that firm size, promotional activities, the formal status of the firm, demand conditions, and the short and long-term external financing position were important explanatory factors behind the probability of obtaining trade credit. Other studies focused on credit risk management in loan administration for commercial Banks and found that relationship existed between credit risk management practices and profitability.

Finally, studies linking trade credit and value of firm where done in developed countries and pointed on different direction with, one citing existence of a significant and positive relationship and the other one, a quadratic relationship between the two variables.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology used in this study. It covers research design, population of study, sample of the study, data collection methods used as well as data analysis technique applied.

3.2 Research Design

The research design is the blueprint for fulfilling objectives and answering the questions, (Cooper and Schinder, 2008). Bryman and Bell (2007), advocates that, research design is the element which provides the framework for collection and analysis of data.

This research study used descriptive correlation design. A descriptive correlation study describes the relationship among variables in a particular sample. According to Lappe (2000), the design is used to describe the relationship between variables when there is no ability to manipulate or control the independent variables. This design includes an analysis of the relationship between predictor and criterion variables (Salkind, 2006). With this study, a panel data was obtained from firms listed at the Nairobi securities exchange for four year period between 2009 and 2012.

3.3 Target Population

The target population is the total collection of elements about which the researcher wish to make some inferences (Cooper and schindler, 2008).The target population for this research study was 39 Non Financial Public companies listed at the Nairobi securities exchange between 2009 and

2012.This time period was be used so as to get more current information on trade credit in Kenya. Currently, there are 60 Companies licensed and regulated under Capital Markets Authority (CMA) as at 31st Dec 2012(Appendix 1).Out of this Firms,Fifteen Firm Lie in Financial segment while six Firms lacked data and was excluded from the population.This population was choosen because of the availability of data for four consecutive years between 2009 and 2012.

3.4 Data Collection

Secondary data was collected from 39 firms for four consecutive years between 2009 and 2012. Specifically data on these firms was obtained from published statements of financial position and statement of comprehensive income. Data collected included; Accounts receivables balances, Total assets, Total liabilities, Market capitalization, Total Equity and Net Income .Data was collected using desk research from Nairobi securities exchange and Capital markets authority handbook manuals.

3.5 Data Analysis

This is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided. It is one of the many steps that must be completed when conducting a research study. Data from various sources is gathered, reviewed, and then analyzed to form some sort of finding or conclusion. In this study, statistical package for social sciences (SPSS) and Microsoft excel were used to aid in data analysis.Data was analyzed using regression analysis to determine relationship between the two variables. Both T-test and Analysis of variance (ANOVA) were used to test the significance of the regression model.

3.6 Variable Definition and Model Specification

3.6.1 Dependant Variable

The dependent variable in the study is value of firm, which has usually been measured in the financial literature with Tobin's Q (McConnell and Servaes, 1990; Berger and Ofek, 1995).This study used , the approximation for Tobin's Q that Chung and Pruitt (1994) suggested, which is defined as the ratio of market value of firm to the replacement cost of its assets. Specifically, it is calculated as the ratio of market value of equity plus book value of total debt to book value of total assets (Q).

Tobin's q (firm value) $= \dfrac{Equity\ market\ value + Liabilities\ book\ value}{Equity\ Book\ Value + Liabilities\ book\ value}$

3.6.2 Independent Variable

The main independent variable to analyze was trade credit proxied by accounts receivable (AR). Accounts receivable balances was be extracted from the published statement of financial position.

3.6.3 Control Variables

Control variables of size and leverage were used in the regression equation. The size (S) of the firm was measured by return on assets (ROA) which is annual net income divided by average total assets.   ROA $= \dfrac{Annual\ net\ income}{Average\ total\ assets}$

Leverage (Lev) was measured as total debt divided by shareholder equity.

Empirically, Lang and Stulz (1994) found a negative relation between firm size and firm value for U.S. companies, Berger and Ofek (1995) find a positive relation, and Demsetz and Villalonga (2001) report a non-significant Relation. Previous literature points in different directions with respect to the impact of debt on firm value (Harris and Ravid, 1991).Debt may yield a disciplinary effect when free cash flow exists (Jensen, 1986; Stulz, 1990). Firms can also use debt to create tax shields (Modigliani and Miller, 1963). However, leverage can also have a negative effect on firm value because of the agency cost of debt (Jensen and Meckling, 1976).

Regression Model

$$V = \beta_0 + \beta_1 (AR) + \beta_2 (S) + \beta_3 (lev) + \mu$$

The actual model used in the study is;

$$V = \beta_0 + \beta_1 (\text{Trade Credit}) + \beta_2 (ROA) + \beta_3 (\text{Debt/Equity}) + \mu$$

Where:

V　　　　is the predicated firm value proxied as Tobin's Q

AR　　　is Trade credit proxied by accounts receivable balance

S　　　　is firm size as control variable represented by return on assets (ROA)

LEV　　　is leverage as control variable represented by the ratio of total debt to shareholder's equity

μ　　　　is the error term

β_0 is the intercept

$\beta_1, \beta_2, \beta_3$ Are the regression coefficients

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSION

4.1 Introduction

This chapter presents results and findings of the study based on the research objective. The results were presented in the form of summary tables and graphs. Regression analysis was used analyze the data so as to answer the research objective.

4.2 Data Analysis and Findings

Table 1: Descriptive Statistics Variables

	N	Minimum	Maximum	Mean	Std.Deviation
Tobins Q (Value of firm)	156	0.0518	4.6563	1.1761	0.8913
Accounts Recievables	156	1590.6	45840048	2184555	4701343.473
Return on Assets (Size)	156	-0.5838	0.4727	0.0742	0.10747
Leverage	156	0.0509	7.499	1.2	1.1598
Valid N (listwise)	156				

Source:Resercher 2013

This table provides descriptive statistics for the data employed in the analysis. The data was collected from 39 Non Financial firms listed at the NSE for period between 2009 to 2012.The Variables are the following: Accounts receivable, Return on assets, Leverage and Tobin's q. N=156 represents total Number of observations in the study.The mean for Tobin's q is 1.1 which implies that the average value of Firms listed at NSE lies within the standard level of 1.0 and therefore value of firms in the study are maximized.Firms listed at the NSE put more investment in accounts recievables as shown by the mean value in the table above. The mean value of return on Assets is 0.074 or 7.4% which is way above 5% rule of thumb required by investment professionals.Finally, the mean value of Leverage is 1.2 implying that the firms listed at NSE uses more debt finacing relative to Equity Financing.

Table 2: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.01561	3	6.005	8.6828	.000
	Residual	105.12571	152	0.6916		
	Total	123.1414	155			

Source:Resercher 2013

ANOVA findings (p-value of 0.000) in table 2 above shows that there is correlation between the predictor variables and Dependent Variable and therefore the model is Significant at 95% Confident level. The ANOVA table also shows regression sum of squares of 18.016 out of total variation of 123.141 pointing to the fact that about 14.6% variation in the dependent variable is explained by the model. In addition, the significance value of the F-statistic is less than 0.05 which means that the variation in the dependent variable explained by the model is not by chance and therefore statistically significant.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.3825	0.1463	0.1294	0.8316

Source:Resercher 2013

From the above table which shows regression results,about 14.6% of Variations in Value Firm can be accounted for by the model (adjusted R^2 of 0.13).

Table 4: Coefficients of Regression Equation

| Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			Std. Error	Beta		
1	(Constant)	0.8896	0.1137		7.82273	0.000
	Accounts Recievables	-5.84E-09	0.000	-0.0308	-0.4093	0.6829
	Return on Assets (Size)	3.1721	0.6263	0.3825	5.06433	0.000
	Leverage	0.0531	0.0582	0.06913	0.91243	0.3629

Source:Resercher 2013

The dependent variable of the study was the value of firm as represented by Tobin's q.The result findings of the regression coefficients is as per table above.

 The Regression Equation is as follows:

V=0.89-0.000000005841AR+3.172S+0.053LEV

At zero change in independent Variables, the value of Firm will 0.89.For every unit change in Accounts receivable the value of Firm will decline by 0.000000005841units.Thirdly, a unit change in the size of Firm as represented by return on Assets ,the Value of firm increases by 3.172 units and finally a unit change in Leverage leads to an increase in Value of Firm by 0.053 units.

Figure 4.1:Tobins q and Accounts recievables

Scatter Diagram for Tobins q and Accounts Recievables

R Sq Linear = 0.002
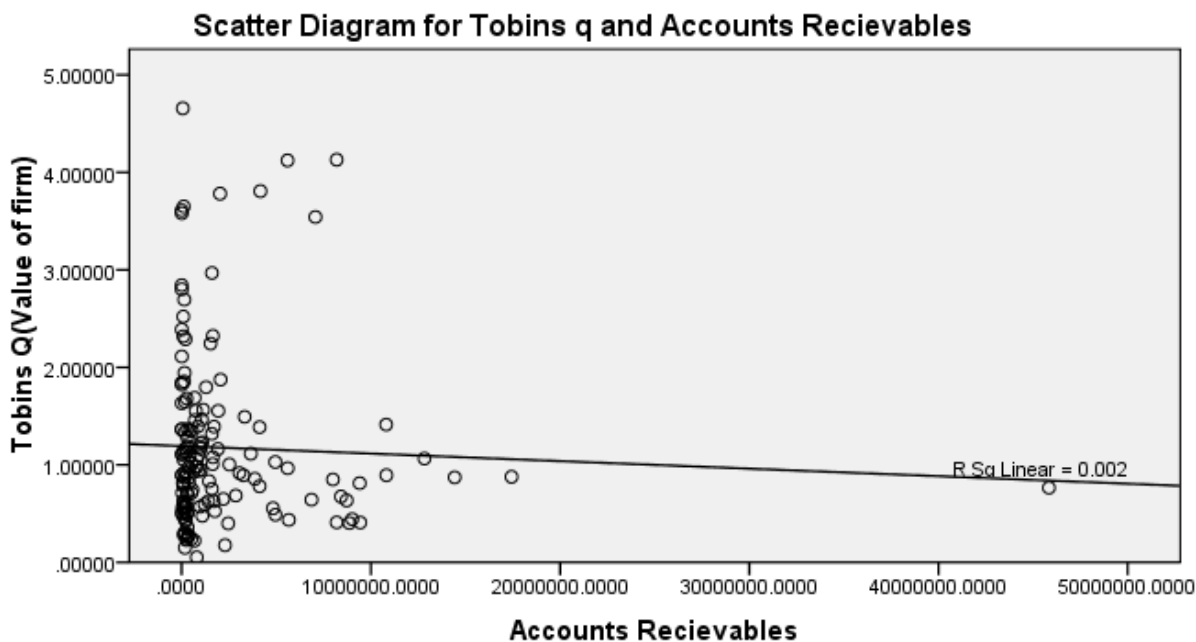
Source: Researcher 2013

The scatterplot above shows Negative relationship between the investment in account recievables and Value of Firm as shown by downwards slope of scatter line. P-Value of 0.683 lies far above 0.05 implying that the Accounts receivable data is not Normally distributed as illustrated by the scatter Diagram.

Figure 4.2:Tobins q and Return on Assets Scatter Diagram
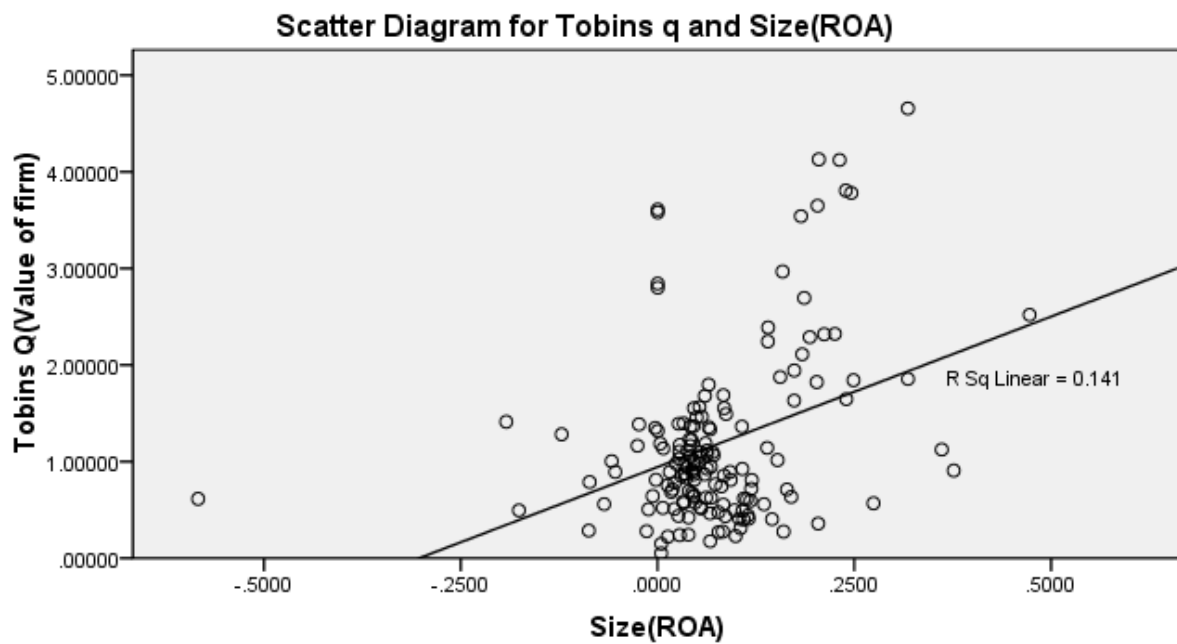
Source:Researcher 2013

The Size the Firm as proxied by ROA has a positive and significant relationship with the Value of Firm as illustrated by updward slope of the scatter line.P-Value of 0.000 implies that ROA data is Normaly distributed as it lies within the 95% confidence level.

Figure 4.3:Tobins q and Leverage Scatter Diagram
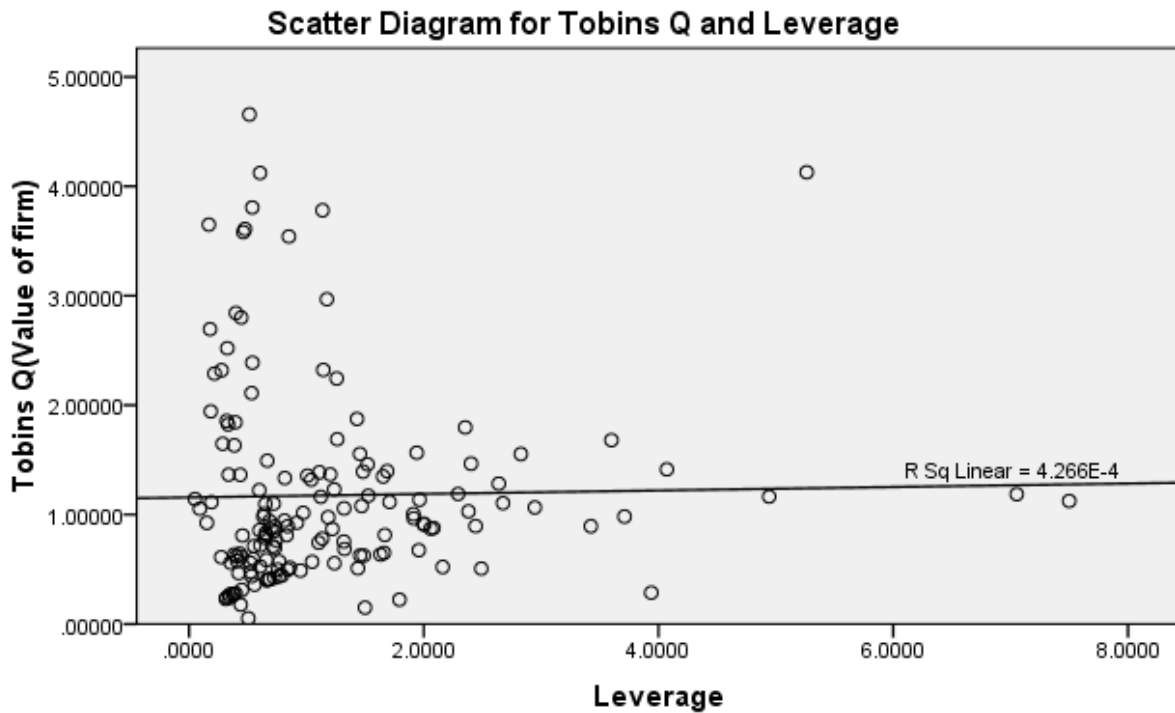
Source: Resercher 2013

Leverage is positively related to Value of Firm as illustrated by gentle updward slope of the scatter Line.P-Value of 0.363 lies far away from alpha=0.05 and thefore not normally distributed as depicted by the scatter diagram.

4.3 Conclusion

There exists an inverse relationship between Trade credit and Value of firm as shown by the Negative coefficient of the accounts receivable. This relationship is however insignificant with P-Value falling away from 0.05 degree of confidence.There exits a positive and significant relationship between the Value and the Size of the firm compared to other independent variables

in the regression Model as illustrated by p-value of .000 and a positive beta coefficient.Finally,the positive coefficient on the Leverage variable is consistent with a tax argument (Modigliani and Miller, 1963), and a free-cash-flow argument (Jensen, 1986).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECCOMMENDATION

5.1 Introduction

This chapter summarizes the findings of the research and shows how they relate to the objective of the research study as put forward in Chapter one. Limitations of the study and suggestion for further research are also discussed.

5.2 Conclusions

The objective of the study was to establish the relationship between trade credit and value of firms listed at the Nairobi securities exchange. The dataset used for the investigation was a Four-year panel of 39 Non-Financial firms listed at the NSE, for period between 2009-2012. The paper started with a descriptive analysis, which was followed by a regression analysis. In Contrast to previous studies, the study found a Negative and insignificant relationship between the two Variables.This is supported by the Literature according to Nadiri (1969) ,that trade credit is costly and involves an opportunity cost. It also supports findings of Cheng and Pike (2003) that trade credit it involves bearing the credit risk, due to the exposure to payment default,resulting to negative effects on profitability and liquidity. The scatterplot of Tobins q and accounts recievables provides evidence that, the Value of Firm is high when the investment in accounts recievables is at low levels and decrease with increase in accounts recievables.This is consistent with findings by Cristina and Pedro (2007) who sought to investigate on the level of accounts recievables that maximizes the Value of Firm.

It is worth to Noting that investment in accounts receivable is no longer uniformly beneficial and investors will pressure firms to limit trade credit granted to mitigate opportunity cost and financial risk, and reduction in profitability and liquidity while also encouraging managers to maintain an investment in accounts receivable which maximizes operational, financial, and commercial benefits.

The regression model was significant at 95 percent degree of Confidence and Model Variables accounted for 14.6% in Variations of Firm Value as per the study results. This calls for the Need by Managers to properly manage the Accounts recievales, Debt use and Assets in generation of shareholder wealth.

5.3 Limitations of the Study

This study was however limited by the Missing data and gaps in the Financial statements both at the NSE and CMA Handbook manuals leading to some companies Left out of study which could have affected the study results.Specifically, the Companies that were not included due to lack of data or incomplete data where ; Longhorn Kenya ,City Trust,Bauman Capital , Hutching Bieimer and Kenya orchards.

The time period of data i.e 2009-2012 coincided with periods of global financial crisis which may have affected the Accounts receivables Levels and Leverage policies of Public Companies in Kenya.

Thirdly, time period under the study was short i.e four years between 2009-2012.More accurate results could be found if the study was done for a longer period.

Finally the study was also limited by Financial and Time constraints as more period of study meant additional money in form of fees to NSE to make the data available and also the time required to collect and organize the data.

5.4 Suggestions For Further Study

The analysis might be extended in several directions by investigating the value of investment in accounts receivable across industries in Kenya. It would be also interesting to test whether there is a inverse Receivables-Value relation for a sample of SMEs. These firms may be forced to grant trade credit despite the costs associated to it, because not granting trade credit would lead to loss of sales, and profitability would decrease.

A study in this area with Longer period to capture more Macroeconomi factors as Financial statements for longer period and therefore remove any skew that may have been caused by the period of study.

A Study to investigate on the optimal Level for investment in accounts receivable that Maximises the value of Firm is necessary, since different Firms and businesses have different Trade credit policies.This will help in coming up with standard practice for accounts recievables management to help firm in maximizing the shareholder wealth.

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Appendix 1

Listed Companies as at Dec 2012

AGRICULTURAL
1. Eaagads
2. Kakuzi
3. Kapchorua Tea
4. Limuru Tea
5. Rea Vipingo
6. Sasini
7. Williamson

AUTOMOBILES & ACCESSORIES
8. Car & General
9. Marshalls (E.A.)
10. Sameer Africa
11. CMC Holding

BANKING
12. Barclays Bank
13. CFC Stanbic Holdings
14. Diamond Trust Bank
15. Equity Bank
16. HFCK
17. Kenya Commercial
18. National Bank
19. NIC Bank
20. Standard Chartered
21. The Co-op Bank

COMMERCIAL AND SERVICES
22. Express Kenya
23. Hutchings Biemer
24. Kenya Airways
25. Nation Media Group
26. Scangroupp
27. Standard Group
28. TPS Eastern Africa
29. Uchumi
30. Longhorn Kenya Ltd

CONSTRUCTION & ALLIED
31. Athi River Mining
32. Bamburi Cement

33.Crown Berger Kenya
34.E.A. Cables
35.E.A. Portland Cement

ENERGY & PETROLEUM
36.KenGen
37.KenolKobil
38.Kenya Power
39.Total Kenya

INSURANCE
40.CFC Insurance Holdings
41.Jubilee Holdings
42.Kenya Re Insurance
43.Pan Africa Insurance
44.British-American Investments
45.CIC Insurance

INVESTMENT
46.Centum Investment
47.City Trust Ltd
48.Olympia Capital
49.Trans-Century

MANUFACTURING & ALLIED
50.A.Baumann& Co
51.B.O.C Kenya
52.BAT
53.Carbacid Investments
54.East African Breweries

55.Eveready East Africa
56.Kenya Orchards Ltd
57.Mumias Sugar
58.Unga Group

TELECOMMUNICATION & TECHNOLOGY
59.AccessKenya
60.Safaricom