RELATIONSHIP BETWEEN TRADE CREDIT AND FINANCIAL PERFORMANCE OF SUPERMARKETS IN KENYA: EVIDENCE FROM MACHAKOS COUNTY

BY

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DECLARATION

I, the undersigned, declare that this research dissertation is my original work and has not been previously submitted to any other institution of higher learning for the award of degree of master in business administration.

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DEDICATION

I dedicate this research dissertation to my wife Mercy Mueni, who encouraged me and believed that I have what it takes to do this work. Also to my children Melvin and Melba who provided me with moral support and encouragement.

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I acknowledge God for the gift of life, health, and wellbeing. I also appreciate my lecturers at St. Paul's University for guidance and support; particularly my research supervisors William K. Sang and Dolreen Muriithi for their assistance and mentorship. I further appreciate the contributions and support I received from various individuals and organizations towards my research.

ABBREVIATIONS AND ACRONYMS

FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
GAIN	Global Agriculture Information Network
GoK	Government of Kenya
KSh	Kenyan Shillings
SSA	Sub-Saharan Africa
USA	United States of America
US$	United States Dollars

ABSTRACT

High profits are the aspirations of any firm. This has made entrepreneurs to be creative especially in retail outlets. In Kenya, there has been an increased expansion of retail chains, especially supermarkets. This expansion has an undertone of a booming business venture. The ability to stock (all) goods to the satisfaction of the customers might be a tall order. This calls for some creativity among the retailers. This gives the supplier the opportunity to meet customer needs which is a silent witness to increased financial performance. Retail supermarkets play a very key role in the distribution of household goods, especially in towns. There is need to investigate possibility of the relationship between the continued trade credit and financial performance. The general objective of this study was to establish to establish the relationship as noted above. Secondary data was used in the study. A descriptive approach was used. A regression of the variables was undertaken using Statistical Package for Social Sciences (SPSS), version 23. This elaborated on the possible relationship between the two variables. Conclusions were then made from the correlations and recommendations given for improvement. The study determined that trade credit constructs namely: trade receivables and trade payables were jointly significantly related to financial performance of the supermarkets in Machakos County. The study determined that trade payables, a trade credit construct, significantly influenced return on assets (ROA) of the supermarkets in Machakos County. According to the study, trade receivables significantly influenced ROA of the supermarkets in Machakos County. It can be concluded form the study findings that trade credit generally is a critical antecedent of ROA of supermarkets in Machakos County. The study further concludes that trade credit constructs, including the trade payables, and trade receivables were significantly related to ROA. This means that policy making institutions ought to pay keen attention to the dynamics of the variables. The study further recommends that in order to have a proper policy-practice nexus, various stakeholders in the retail industry including regulatory bodies, retail owners, and suppliers ought to develop systems and processes that would trigger retail sector development. This could be through robust collaboration between the policy makers and the practitioners. Specifically, the study recommends that the academics should develop models that can be used by management practitioners to enhance the growth of their firms.

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CHAPTER ONE
INTRODUCTION

1.0 Introduction

This chapter introduces the study. It gives the background of the study which gives a hindsight to the germ of the study. By way of introduction it hints on the aspects of trade credits and financial performance. The chapter looks at supermarkets in Kenya then narrows to Machakos County. The chapter also focuses on the research problem, objectives of the study, scope of the study, limitations/delimitations (defining boundaries of research) and possible challenges to be encountered during the study.

1.1 Background of the Study

Supermarkets began in the United States of America in 1920s and later became dominant in the late 1950s. The rise of supermarkets in developing countries has received considerable attention in the development economics literature over the past few years (Reardon, 2003). According to research by Global Industry Analysts, supermarket sales are expected to generate more than $2.4 trillion worldwide by 2020. Supermarkets growth has been brought about by increase in consumerism. Since their origin, supermarkets have been grown all over the world with some securing their place at the top of the world's retail stores chain (Ramappa & Shivaprasad, 2013).

Supermarkets are rapidly growing, mostly, in urban areas at an annual rate of 18.3% (Neven & Reardon, 2004). According to State Department of Trade in Kenya, 2017 Report, the significance of the retail trade as an engine for Kenya's economic growth is underscored in Vision 2030 where the government targets to raise the share of products sold through the formal retail channels, such as supermarkets, from 5% in 2007 to 30% by 2017. This was envisaged to trigger an increase in GDP by 50 Billion Shillings.

Trade credit is an understanding between seller and buyer where the former allows delayed payment of goods instead of cash payment. In countries where there is financial

markets breakdown and information asymmetric, contract enforcement is insecure thus making trade credit more important (Ojenike & Olowoniyi, 2012). Broadly trade credit can be categorised into two parts; account receivables and account payables.

On one side, trade credit is measured as an asset in terms of accounts receivable. On the other side, trade credit is measured as short-term arrears, liability, in terms of accounts payable. Several attempts have been made to explain why companies sell on credit irrespective of the risk of bad debts that come with selling on credit, investment in receivables and the costs of debt collection (Dong & Su, 2010). Generally, trade credit to customers and gaining from suppliers can enhance the growth and financial performance in supermarkets. Supermarkets, through provision of credit to their customers, increase the dependability of the debtors on the business. Likewise, the account payables provide more relaxation to the company by granting trade credit in the shape of credit purchases.

According to Tang (2014) financial performance of a business has magnificent effects of trade credit either it is account receivables or account payables to verify its effects upon supermarkets. There is a credit balance that minimizes the costs of advancing credit as well as maximizing financial performance, which shows that both high and low credit levels are associated with a lower financial performance (Silva, 2012).

The link between trade credit and financial performance is anchored on transactional cost theory, pricing theory, liquidity theory, sales promotion theory and verification theory. The key theory underpinning this study is the transaction theory which suggests that exchange costs can be reduced through trade credit by separating money exchanges from goods exchanges (Ferri, 1981). Upcoming supermarkets have resulted to trade credit in terms of trade receivables and payables for various reasons. This includes: growth of market share and visibility which leads to increased sales resulting to more revenue, inadequate funding; which necessitates trade credit.

1.1.1 Trade Credit

According to Mian and Smith (1992), trade credit is an arrangement between a buyer and seller by which the seller allows delayed payment for its products instead of cash payment. Ferris (1981) terms trade credit as "a loan that is tied in both timing and value to the exchange of goods". According to Lee and Stowe (1993), trade credit 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. From these definitions, trade credit can refer to the undertaking of acquiring goods on credit, stocking them for sale or use then paying later.

Trade credit is a major vital item in business life cycle for many businesses (Choi& Kim, 2005). Trade credit arises from delayed payments between businesses. As noted by Babalola (2014), trade credit is a more flexible way for short term financing for many businesses. In some of the developed countries such as the US, some sellers do not require spot payment of goods upon delivery but give their customers a short grace period to verify the product before payment is due. During this period, the buyer enjoys the credit. Generally, suppliers are more liberal in the extension of trade credit than financial institutions. A supplier views random late payment less critically than ordinary lenders (Babalola, Yisau & Ivanivna 2014).

Babalola (2014) opines that trade credit from suppliers is a key source of business finance, especially to small enterprises. This is also known as finance in kind or supplier credit and forms part of business financing policy. When a business buys its supplies on credit from other businesses, it records the debt under account payable which represents source of financing.

The seller makes an investment through supply of goods in credit as shown in his accounts receivable (Ojenike & Olowoniyi, 2012). In addition to increasing demand, Hill et al. (2012) points out that suppliers can gain revenue from trading in credit through interest income. Offering products on credit to customers may increase market share, earn

customer loyalty and reduce cost thus affecting a business's overall perfomance, (Abuhommous, 2017).

Trade credit tends to improves ease of doing business. Through relaxed terms of credit, suppliers can reduce stock holding costs as well as vary production in line with changes in demand (García-Teruel & Martínez-Solano, 2010). Suppliers offer discount on early payment which reflects interest rate for the late payment. This shows that rate of return on trading in credit is more than normal cash basis thus an investment for the supplier. This is true when customer default risk is low (Hill, Kelly, & Lockhart, 2012).

Younger businesses extend less credit to their customers while old businesses extend more credit to customers because they may have other sources of finance as a result of their credit capacity and reputation (Garcia & Martinez, 2010). This case as supported by dependency theory holds that businesses may have trouble in accessing critical resources, thus rely on suppliers to offer part of these resources (Hermes, Kihanga, Lensink, & Lutz, 2011). Likewise, trading in credit can be considered as a switching barrier. Buyers may lose access to trade credit finance if they opt to switch to new suppliers as suppliers only offer trade credit to buyers that they have establish mature relationship with (Hermes et al., 2011).

As suggested by Tirole, (2006), more than 80% of business transactions in United Kingdom are done on credit. The researcher also observed that, that there are two forms of trade credit; account receivables and account payables. The business provides credit sale to its customers and presents it on the balanced sheet as debtors common referred to as receivables. Secondly, the business can take the credit purchase by its suppliers by putting the creditors, notably, accounts payables on the balance sheet in liability side.

1.1.2 Financial Performance

Financial performance (FP) as an objective measure assesses how best revenue can be generated from the business primary undertaking (Waddock & Graves, 2011). Bulle (2012) defines FP as a general measure of a business's overall financial wellbeing over a

given period of time. FP measure can be used to make comparison of similar business in the same industry and also across different industries and sectors of the economy. According to Pandey (2010), FP is a common measure of business overall financial wellbeing over a given period of time, expressed in terms of profits or losses.

Financial performance is the extent to which financial goals have been accomplished. It is the process of measuring businesses policies and operational results in monetary terms (Ojiuko, 2001). Thus, financial performance refers to any company's ability to generate new resources, from day to day operations, over a given period of time. One key importance of financial performance is that it helps in judging the development of a company position in the market.

FP is also used to show a business success rate and compliance. Financial performance analysis not only helps businesses realize potential benefits from investments (Alenezi et al., 2015), but also enhances business financial performance (Abu-Shanab, 2014). However, no single measure of performance can fully account for all aspects of business performance (Masa'deh et al., 2015).

Researchers have used both hard performance measures, such as sales; market share; return on assets; other financial ratios and soft measures of performance (non-financial measure) which include customer satisfaction; learning; and innovation (Gentry & Shen, 2010). Items in income and cash flow statement as well as statement of financial position can also be used to measure FP.

For instance, liquidity measures the ability of the business to meet its financial obligations as they fall due without affecting the company's normal business operations (Huselid, 2010). Ratios are used to measure and to gauge the financial performance and position of a company within a given period of time. ROA evaluates how efficiently assets are used to produce profits. It is widely considered the best measure of financial performance. ROA is used internally by companies to track asset use overtime, monitor

business's performance. ROA is measured by dividing profit before tax and interest by total assets (Manasseh, 2007).

Financial performance analysis focuses on the relationship between income and expenses and on the level of profits relative to the size of investment in the business. For instance, return on sales shows how much a business earns in relation to its sales. Return on assets (ROA) shows business's ability to make use of its assets while return on equity (ROE) reveals the return on investments (Roberts & Dowling, 2012).

The rate of profit is measured by the accountant, limited by standards established by the profession and is hence impacted by the accounting practices like the various methods employed for the assessment of tangible and intangible assets (Kapopoulos & Lazaretou, 2007). Financial performance management pertains to maintaining or increasing a business's earnings through sales volume, pricing policy, inventory management, cost control and capital expenditures (Myers, 2010).

Hill, Kelly, and Lockhart (2012) also show that business characteristics can affect the link between financial performance and accounts receivable. According to Helfert (1991), financial performance refers to the effectiveness with which management has engaged total assets as recorded in business books. The effectiveness is judged by relating net profit to the assets utilized in generating the profit. ROA percentage measures how profitable a company's assets are in generating its revenue. ROA, as an accounting-based measurement, gauges the operating and financial performance of the business (Klapper & Love, 2002).

This measurement is such that the higher the ROA, the more effective the use of assets in serving the economic interests of its equity holders (Ibrahim & AbdulSamad, 2011). When a business shows a positive performance through ROA, it is an achievement of prior planned high performance (Nuryanah & Islam, 2011). A negative ROA indicates failure of planned high performance which calls for revision of plans to enhance short-term performance and avoid losses.

1.1.3 Supermarkets in Kenya

Supermarkets existed in Latin America in the 1960s, but began to grow more rapidly in that region during the economic boom and opening to Foreign Direct Investment (FDI) in 1990s. Growth began later in East/Southeast Asia and Central Europe, followed by selected countries of Africa (Reardon et al., 2004). According to Kenya Economic Report (2017), retailing is one of the important sector(s) in Kenya's economy. Retailing being the sale of goods and services to the consumers for personal, family or household use, serves as an important part in the supply chain.

Retailing is also an important tax collection point because value added tax (VAT) is collected at retail level as well as contributing to the welfare of the consumers by offering goods at reasonable prices. Kenya had over 206 supermarket outlets in 2002 (Weatherspoon & Reardon 2002) which doubled to slightly over 410 outlets in 2016 (GAIN, 2017). Majority of Kenyan supermarkets were established in major towns but due to economic growth they are now situated across the country (Botha & Schalkwyk, 2007).

Supermarkets in Kenya not only target the middle class but also the working urban poor. This trend of first targeting upper, middle- and lower-income classes and further urban market and then moving to rural-town markets shows that there will be a steady and rapid growth of supermarkets in Kenya and the East Africa (Weatherspoon & Reardon, 2002). Supermarkets in Kenya have also expanded to other countries within the East African region. Currently, Tuskys operates five branches in Uganda.

Supermarket growth has been driven by: lifestyle changes, urbanization, investor attractive FDI policies, economy growth and market liberalization (Kamau, 2008). As noted by Neven and Reardon (2005), there were two market leaders in 2003, Uchumi and Nakumatt supermarkets, which together controlled nearly 50% of the supermarket sector. However, the two oldest retail chains in Kenya are battling huge debts, and struggling to stay in business. Uchumi has closed its outlets in Uganda and Tanzania, while Nakumatt has closed 19 stores (14 stores in Kenya; 3 in Uganda and 2 in Tanzania). Tuskys and

Naivas are now leading the retail market (GAIN, 2017). Tuskys is ranks first, Naivas Ltd second, Naivas Holdings third while Uchumi ranks as fourth in the retail market.

Until the year 2015, locally-owned retail chains dominated the Kenyan market. A relatively liberal market environment, with few laws regulating the industry favored the entry of the foreign-owned outlets which include South Africa's Massmart Holdings Ltd, Game Store in 2015, Botswana's Choppies in 2016, and the French retail giant Carrefour in 2016. Metro Cash and Carry made an exit in 2005 (GAIN, 2017). Supermarkets have undergone have under gone major changes over the recent past.

This has not only been the case in the developed countries but also in the emerging markets. There has been expansion in the sector and almost an equal shrink among some. Indeed, in Kenya, some have gone through turmoil and closure. Modern supermarkets continue to play a key role in transforming Kenya's food distribution system by offering high-quality services such as bookstores, banking services, cafeteria, coffee lounge, fresh agricultural produce section and bakeries. Supermarkets buy three times more produce locally than Kenya exports to the rest of the world (FAO, 2003).

Supermarkets already account for around 5-12 percent of food sold in Kenya and the government is aiming at increasing it to 30 percent by 2012 (GoK, 2008). In developing countries, the provision of trade credit by suppliers may also be an important channel by which businesses can access capital indirectly, through their suppliers because of the difficulty in accessing financial markets, Frank and Maksimovic (2001). Kapkiyai (2015) found out that SMEs in kenya tend to use trade credit to improve their financial performance.

1.1.4 Supermarkets in Machakos County

Machakos County has had an influx in Supermarkets in the last few years. This has been occasioned by devolution system of the Kenyan government, upgrade of the road network, growth of real estate and growth of towns around Nairobi, (GAIN,2017). In Machakos, most supermarkets are family owned majority of which have collapsed due to

losses and as a result of the battle for control of the retail market from established supermarkets. This continues to cause anxiety and lost confidence amongst lenders and suppliers in the industry given the loss of revenue, job opportunities and market for suppliers occasioned by the prevailing challenges (Mwasiaji & Mutinda, 2018).

The issue of performance and problems facing supermarkets acquisition include lack of implementation of competitive strategies (Mwasiaji & Mutinda, 2018). Supermarkets in Machakos County include; Mulleys, Naivas, Tuskys, East Mart, Mass Mart, Kitulani, Ngooni, Nafuu, JM General Store, Kutata, Masaku Provision Store. These supermarkets have branches located throughout the county with many branches located in Machakos town, alongside Mombasa road, and in densely populated town centers within the county.

1.1. 5 Trade Credit and Financial Performance

Given the foregoing understanding of trade credit and financial performance, it is imperative to link the two. The main reason to trade in credit from the supermarkets side is informed by the need to satisfy customer demands even in the shortage of resources.

Studies have studied on to a great extend looked into the issue of trade credit. Kipkiyai (2015) researched on its effects of the small scale trade. Katiwa (2016) researched on the impacts of trade credit on the value of commercial and services firms listed at Nairobi stock exchange. This among other studies have hinted to the centrality of trade credit and financial performance in business.

1.2 Research Problem

Trade credit helps supermarkets in increasing their sales and reducing costs, thus financial performance. Businesses use credit policy to market and expand sales, also to retain old customers (Panday, 1978). Dina (2007) found that customer payment pattern affects financial performance especially unpaid debts. Ability for a firm to increase cash flow and liquidity and to be profitable is influenced by effective credit management. Competition Authority of Kenya regulates the market operations in order to ensure efficient trading.

The retail market has been the subject of some profound changes over the recent past. The subsistence retail market has been changing drastically, particularly on the financial performance front. This has not only been true in the developed countries but also in the emerging markets. There has been expansion in the sector and almost an equal shrink among some. Indeed, some have gone through turmoil and closure. There have been many studies around trade credit impact on financial performance. Hill et al., (2010) studied the relationship between shareholder's wealth from selling on trade credit and accounts receivables in New York and founded that a positive relationship existed.

A study by Cristine and Pedro (2007) focused on trade credit relationship with the business value in Spain by looking at the Spanish manufacturing SMEs between the period 2000 – 2007: the study found that a firm's profitability can improve by increasing investment in trade receivables. Isaksson (2002), in a study on trade credit in manufacturing firms in Kenya, noted that trade credit was part of loan portfolio the firms. A study by Mwololo (2011) investigated the relationship between existing between credit policy and liquidity of oil firms in Kenya and found a linear relationship.

Many of the studies on trade credit were focused to investigating the relationship between trade credit management and profitability, credit policy and value of the firm on banks, manufacturing firms, microfinance firms and SMEs. Few studies were carried internationally to investigate the relationship between trade credit and financial performance of supermarkets. In Kenya, much has not been done to research on the effects of trade credit on the financial performance of supermarkets; therefore, this study proposes to fill the gap. The research question of this study was: What is the relationship of trade credit on financial performance of supermarkets in Machakos County?

1.3 Research Objectives

The general objective of the study was to determine the relationship between trade credit and financial performance among retail supermarkets in Machakos County. The specific objectives were to:

1. Determine the relationship between trade receivables and financial performance among of supermarkets in Machakos County.

2. Establish the relationship between trade payables and financial performance of supermarkets in Machakos County.

1.4 Research Questions

The study aimed at answering the following specific questions:

1. What is the relationship between trade receivables and financial performance of supermarkets in Machakos County?

2. What is the relationship between trade payables and financial performance of supermarkets in Machakos County?

1.5 Significance of the Study

The study is of great importance to various stakeholders in the retail sector. Future researchers can also use the research findings as a base for theory development towards enabling various stakeholders see the potential of trade credit to the establishment and growth of supermarkets which are vital in economic growth. The study can help the management of the individual supermarkets in making strategic decisions.

The management will also be able to manage cash conversion cycle, set effective credit controls departments and credit control standards in order to improve on their finances. The study can benefit the government in reviewing the trade credit regulation and policies to ensure payment of trade credit balances on time, hence motivating firms to enhance more trade credit even to small businesses which contribute a lot to the country economy and who cannot afford to get bank finances.

Trade credit is a source of finance for each party in the trade credit contract, that is, debtor and the seller, delay in payment can help debtors in their cash flow regulation which is good for their survival and success while the seller can sell and collect more

with well managed credit management policy. Potential investor was also be interested with performance of supermarkets and the study findings have shed light on the future of supermarkets thus enabling investors make sound investments decisions. Academicians who may be interested in conducting further research on this area will undoubtedly find this study to be a significant point of reference for literature and research gaps.

1.6 Scope of the Study

This study was restricted to the 5 supermarkets in Machakos County because of paucity of data in the retail sector. The study covered a period of 5 years (2013-2017). Independent variables utilized in this study were trade receivables and trade payables while dependent variable used was financial performance.

1.7 Limitations of the Study

The study was characterised by a few limitations that were largely as a result of its scope. Firstly, the study only modelled trade payables, and trade receivables, as the input variables, with a lot of other micro and macroeconomic factors falling outside the conceptual scope of the study. This is more so because of the multiplicity of those factors. The study also focused exclusively on the supermarkets in Machakos County, yet majority supermarkets in Kenya are outside Machakos County.

The study also relied exclusively on historical data, and yet future trends could be significantly different from the past scenario. The study did not model non-economic factors such as legal, cultural, and political despite elaborate literature emphasizing their influences on the performance of organizations, and hence ROA. This would, however, require skilful development of measurement criteria, given that most of the non-economic factors are qualitative in nature.

1.7.1 Delimitation of the study

For the sake of this study, it will be assumed that trade credit is unequivocal in meaning and understanding. Financial performance will be looked at all spheres ranging from

profits in both accounting and financial perspectives. The findings of the study may thus be needed to be subjected to further testing to be applicable across the market and indeed in the whole country.

1.7 Chapter Summary

The chapter gives an introduction to the area of the study, it explains the background to the study, overview of the trade credit and finaciancial performance of supermarkets in Kenya and in Machakos County, it gives a highlight on the retail sector in Kenya leading to the problem statement. Trade credit is significant for it may influence financial performance of supermarkets in Kenya positively or negatively.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The chapter outlines some significant theoretical perspectives on the relationship among the variables in the study. It comprises an analysis of the key propositions in strategic management theory with respect to their core study problems, their central building blocks, and specifically their leading accounts on the selected variables of the study.

The chapter also consists of empirical discussion on each of the variables under examination, including the knowledge gaps. Key among the knowledge gaps is that majority of the studies have been done in the developed nations and service sectors, with little examination of the African region. This is the basis of the contextual gaps identified in the study.

2.2 Theoretical Framework

The study was underpinned by five theories, namely: transaction cost theory; pricing theory; liquidity theory; sales promotion theory; and verification theory. Each of the theoretical arguments was examined based on strengths and weaknesses in light of the current empirical investigation

2.2.1 Transaction Cost Theory

This theory was developed by Coase (1937). The transaction motive rests on the simplification of payment induced by trade credit. Dagdeviren and Robertson (2016) postulate that trade credit brings down exchange costs. It holds that when transactions between sellers and buyers are frequent both parties may reduce transaction costs.

This is premised on not majorly financing but reducing transaction costs. This work so long as saving in transaction costs remains more than the cost of holding receivables. According to Tsang (2010) 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 Zsidisin and Ellram (2001) found support in the empirical findings of Sjoerdsma and Weele (2015) 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.

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 (Ongeti, 2014)). Different dimensions of costs theory suggest that trade credit is an operational tool to reduce various costs.

One of the main criticisms of transaction cost 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 (Bougheas et al., 2009).

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 (Bukart and Ellingsen, 2004). 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. Generally, 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, Smith (2009) pointed out that vendor financing enables price discrimination between cash and credit customers. The 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, 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.

According to Salima and Cherif (2009), 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. Therefore, 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 (Weyl, 2017).Indeed, 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, Dasgupta, & Kim, 2004).

2.2.3 Liquidity Theory

This theory was developed by Keynes (1936). 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 (Bibow, 2005). 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-today 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, & 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 (Cuñat´s, 2007). 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 & Pike, 2003).

This theory is based on "buyer opportunism" which was first noted by Petersen and Rajan (1997) and was further evidenced by Wilner (2000). When a supplier cannot credibly threaten to stop supplies for example, when the supplier 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 customers; the supplier simply cannot afford to make such threats. As Wilner (2000) 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, for example, larger discounts, from the suppliers in financial distress. Bibow (2005) found that suppliers (trade creditors) desiring to maintain enduring product market relationships are found to grant more concessions to a customer in financial distress.

According to 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.

Others such as Cheng and Pike (2003) 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 serve mass markets. 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 the debtor delays the payment and, in the meantime the firm goes bankrupt, the debtor can avoid the payment altogether. Although "buyer opportunism" generally holds, Cheng and Pike (2003) 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

Sales promotion includes all the relevant "activities, materials, and media used by a marketer to inform and remind prospective customers about a particular product offering (Connett, 2004). Sommers and Keenan (1967) introduced the "promotional theory. They opined that, promotion in all its ramifications is discussed. Such discussion involve promotion as a case of communication, the behavioral structures and process, the nature and function. The goal of promotion is to persuade the target consumer to buy or consume the product offering.

The sales promotion motive 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 (Cuellar-Healy, 2013). 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 linkages with customers, and again like advertising, it generates income over time. According to Cuellar-Healy (2013), like advertising, trade credit is a non-price variable that influences product demand through differentiation. The author found out 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 Adefulu (2015). In the article "Vendor Financing" noted that accounts receivable was positively correlated with supplier's price-cost margin. Others such as Blazenko and Vandezande (2003) examined 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. A firm may increase product price when marginal cost rises but as a consequence sale 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 (Adefulu, 2015).

2.2.5 Verification Theory

Verification theory is also termed as quality guarantee theory. The prediction of this theory rests on 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. Hays (2006) noted that trade credit reduces the information asymmetry between buyer and seller 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 (Horen, 2007).

Trade credit can also be interpreted as an implicit quality guarantee (Desveaux, 2017). In this sense, trade credit is used by firms' customers as a device to manage and control the quality of the items purchased (Schich, 2008). This theory is based on asymmetry of information between buyer and seller. The buyer does not know the quality of the product he/she is buying. If the buyer pays cash on delivery and the product turns out to be of poor quality, the buyer ceases to have effective control over an errant supplier, the buyer loses the cash and the product as well. In other words, if the buyer cannot insure himself against malfunctioning of the product, the buyer will discount the expected gain from the purchase with his estimation of the risk factor. Hence the riskier 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 (Horen, 2007). The seller may also be out of business by the time the defect in the product gets ascertained. If the buyer is a reseller, the buyer 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. Schich (2008) also found that it is often the sellers who offer trade credit to enable the buyers to verify product quality before making payment. Kashyap (2001) 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, where the optimal level of accounts receivable occurs when the marginal revenue of trade credit is equal to the marginal cost (Desveaux, 2017). Lidén (2003) 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. It can be opined that 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 (Kashyap, 2001). 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 (Choi, 2005). According to the European Payment Index Report (2011), 1.25% of all bankruptcies are due to late and/or nonpayment of outstanding invoices. Late payment limits firm's 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.

Desveaux (2017) 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 (Lidén, 2003; Holden, 2014). 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 Desveaux (2017), 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 Empirical Literature Review and Knowledge Gaps

A study was carried by Tang (2014) for a period between 2009 and 2013 to investigate how trade credit from both supplier side and demand side effects profitability of the SMEs in Netherlands. The study used descriptive statistic and covered 71 SMEs in Netherlands. The study found that trade credits (accounts payable) is positively associated to profitability and that there is the need for SMEs to develop a long-term relationship with suppliers for them to access trade credit in an easier and a fast way.

An investigation by Ferrando and Mulier (2012) sought to determine if firms utilize trade credit in managing growth, the study used descriptive research design using 2.5 million observations from 600.000 firms in 8-euro countries in the period from 1993 to 2009. The study found that firms utilizes trade credit in managing growth. Martínez-Sola, García-Teruel and Martínez-Solano (2010) study carried for period between 2000-2007 to investigate the implications on profitability as a result of providing trade credit financing to customers, 11,337 Spanish manufacturing SMEs were sampled. The study used descriptive statistics. This study found that, managers can increase firm’s

profitability by investing more in trade receivables, this is experienced greatly in bigger and liquid firms which experience volatile demand, and also businesses with big market segment. The study therefore concluded that there exists positive linear association between trade credit and the firm's profitability coming from the view that values of trade credit exceed vendor financing costs.

A study by Melita Charitou, Petros Lois and Halim Budi Santoso (2012) examined the relationship between the impact of credit policy on firm Profitability. They used a multivariate regression analysis on cross-sectional data based on information from Indonesian firms. Working capital was measured as the cash conversion cycle and the net trade cycle and profitability was measured as ROA. The regression model was linear and their main conclusions were that lower levels of working capital increases firm profitability and that higher risk (measured as the debt- and current ratio) decrease firm profitability.

An investigation by Hermes (2006) focused on credit management practice in ten European Economies, the study focused on determining the importance of trade credit, credit policies variations, credit management practices and the credit insurance impact on corporate performance.

Survey was done for 2,000 companies in the following 10 economies: Netherlands, United Kingdom, France, Portugal, Germany, Hungary, Poland, Spain, Italy, and Belgium. The study founded that there are ways companies can review the credit management process elements which make it easy in preventing unforeseen difficulties in operational, hence ensuring steady cash flow while reducing financial difficulty risk among credit insured companies.

Others such as Falope and Ajilore (2009) used a sample of 50 Nigerian quoted non-financial firms for the period 1996 -2005. Their study utilized panel data econometrics in a pooled regression, where time-series and cross-sectional observations were combined and estimated. They found a significant negative relationship between net operating

profitability and the average collection period, and inventory turnover in days. They further found no significant variations in the effects of working capital management between large and small firms.

In Kenya, Kapkiyai and Mugo (2015) carried a study to investigate the impact of trade credit on the financial performance of small-scale businesses in Eldoret town, Kenya. This study looked at a sample of 50 audited small and medium enterprise companies using a descriptive research design. The study found a positive relationship between trade credit and firm's liquidity, profit margin and return on assets.

A survey by Kungu, Wanjau, Waititu and Gekara (2014) investigated the effects of credit policy on profitability of Manufacturing Firms in Kenya using a descriptive research design. This study sampled 81 manufacturing businesses and found a positive association between the profitability and credit policy utilized by manufacturing companies in Kenya.

Others such as Kang'ethe and Kalio (2012) carried a research to ascertain the determinants of trade credit in small and medium sized firms in Nakuru sub county, Kenya. This study used a descriptive survey. The population of study used was the 6624 registered Small and Medium Enterprises (SMEs) in Nakuru town. A sample of 197 SMEs was selected by applying simple random sampling. The study used descriptive statistics in checking for normality of the collected data.

The Inferential statistics was utilized in outlining the implications from collected data with concern to the regression model. The study found that profitability, liquidity, collateral and inventory indicate a positive, significant effect on Small and Medium Enterprises (SME) trade credit. The empirical review suggests that most of the researchers in this area have concentrated on investigating the relationship or impact of trade credit, trade credit management and trade credit policy to firm's profitability, performance and growth and also a few on determinants of trade credit. Other studies investigate whether trade credit is a form of short-term finance.

A local study by Katiwa (2016) focused on investigating the effect of trade credit on value of firms and no other study internationally or locally to have been conducted on investigating the effect of trade credit on financial performance of supermarkets, noting that more than 80% daily business firm's transactions are done on credit terms. Trade credit is most significant form of short-term financing for the corporate sector businesses; thus, they always appear as the main assets on most firm's balance sheets (Rehman & Khurshid, 2016).

A study carried out on Saudi Stock exchange listed companies where the focus was on the effect of credit on firm performance from 2012-2014, with 171 listed companies sampled, Zureigat et al., (2017) determined that there was insignificant between the two variables with regards to operational and financial performance. Nevertheless, the period of study was too short and probably a wider time horizon would have different outcomes.

In their study by Ayumardani and Kusuma (2016) focused on the effect of credit governance of firm efficiency, the population was drawn from Islamic banks in Indonesia. The objective being to study and establish what effect credit has on firm performance. The data used by the study was from 2000 to 2014 analysed using panel data regression analysis. The findings concluded that there was improved performance by the banks that employed credit policy variables. However, the concept of efficiency is much broad and there may be need to investigate the same phenomenon with a focus on financial dimension.

A study by Ali Shah et al., (2016) focused on the relationship between credit finance capping and firm performance in the United Kingdom (UK), using a sample drawn from 435 non-listed firms, and covering the period ten years (1999-2009). The research findings contrasted other previous research done in the UK, with conclusions demonstrating that there was no effect on performance by implementation of credit capping. It however was conducted in a developed economy; hence the results may not apply to the developing economy context such as Kenya.

Investigating the linkages between financial performance and capital structure the context being that of Pakistan listed company using data for a period of 3 years (2002-2005) and analysing it by multivariate regression system, Butt and Hassan (2009) concluded that in determining the financial performance, capital structure variables under study played a crucial role. This study focused capital structure hence its findings may not apply as regards to trade credit.

A study by Kyereboah-Coleman (2007) studied the determinants of shareholder value maximization in Africa through credit policy implementation. The population was from South Africa, Ghana, Kenya and Nigeria, the study period being from 1997 - 2001. Panel regression method was used to analyze and the results demonstrated that corporate governance positively correlated with value maximization. However, the study ought to have considered the fact that trade credit at that period was still at it infancy thus the results not conclusive.

Koech (2018) conducted a research on determinants of effective financial management in state corporations –Kenya. Target population was the managers from 187 state corporations and the data was analyzed using regression method. The results showed that financial management was positively correlated with financial performance in state corporations in Kenya. This study is reliable however it does not consider trade credit aspect.

A study by Ndikwe and Owino (2016) focused on schools that are funded by the government how their financial performance is influenced by embracing credit principles. The studies found out that the major influence on financial performance were skills of the board and board size. To arrive at this conclusion, they used a sample of 49 government funded schools in Kenya, with data being analysed using multivariate regression analysis. The research is less reliable as the study population was small to represent the whole population thus the need to increase the sample of the study population to achieve more reliable results.

A study by Gitari (2008) focused on the outcomes of implementing working capital management on financial performance of government owned corporations. The study focused particularly on the New Kenya Cooperative Creameries (KCC), and the period of the study was January 2003 to December 2005. Data was analyzed using weighting of the scorecard and the results showed that as the company employed working capital policies and financial performance improved. Nevertheless, there was a need for the study to incorporate a longer period bearing in mind there were a lot of restructuring going on during this period, a factor that may have confounded the study findings.

The studies indicate that working capital management impacts on the profitability of the firm but there still is ambiguity regarding the appropriate variables that might serve as proxies for working capital management. The studies provide no clear-cut direction of the relationship between any of the variables of trade credit and supermarkets financial performance. The studies have also not focused on the impact trade credit has on the performance of supermarkets. They have also not discussed whether trade credit should be regulated like the banks credits since this is an era of innovations. The studies have also not reviewed whether efficient and effective trade credit regulation laws were in existence in Kenya. This study will focus to solve these gaps in the previous studies.

Table 2.1: Summary of Literature Review and Knowledge Gaps

Author of study	Focus of Study	Methodology	Findings	Knowledge Gaps	Focus of Current Study
Martínez-Sola, García-Teruel and Martínez-Solano (2010)	Trade credit and Profitability in Small and Medium Enterprises on Spanish manufacturing firms	Descriptive research design	The study found a positive linear association between trade credit and profitability coming from the view that values of trade credit exceed vendor financing costs.	The study has provided no clear-cut direction of the relationship between any of the variables of trade credit and supermarkets financial performance	This study focus was to solve these gaps by analyzing trade credit variables relationship to supermarkets financial performance
Melita Charitou, Petros Lois and Halim Budi Santoso (2012)	Impact of credit policy on firm profitability on Indonesian firms	Descriptive Research Design	The study found that lower levels of working capital increases firm profitability and that higher risk decrease firm Profitability.	The study has provided no clear-cut direction of the relationship between any of the variables of trade credit and supermarkets financial performance	This study focus was to solve these gaps by analyzing trade credit variables relationship to supermarkets financial performance
Falope and Ajilore (2009)	Credit Management and Corporate Profitability: Evidence from Panel Data Analysis of Selected Quoted Companies in Nigeria	Descriptive Research Design	The study found no significant variations in the effects of working capital management between large and small firms.	The study has provided no clear-cut direction of the relationship between any of the variables of trade credit and supermarkets financial performance	This study focus was to solve these gaps by analyzing trade credit variables relationship to supermarkets financial performance
Kapkiyai and Mugo (2015)	Impact of trade credit on financial performance of small-scale businesses in Eldoret town, Kenya	Descriptive research design	The study found that a positive relationship existed between trade credit and firm's liquidity, profit margin and return on assets	The study did not explain the relationship of trade credit on the financial performance of supermarkets	The current study focus was to fill the gap by researching on the relationship between trade credit and financial performance of supermarkets
Kungu,Wanjau, Waititu and Gekara (2014)	Effects of credit policy on profitability of Manufacturing Firms in Kenya	Descriptive research design	The study found that there is a positive association between profitability and credit policy utilized by manufacturing firms in Kenya	The study did not explain the relationship of trade credit on supermarkets financial performance	The current study focus was on establishing the relationship between trade credit and financial performance in the retail sector
Kang'ethe and Kalio (2012)	Determinants of trade credit in small and medium sized firms in Nakuru sub county, Kenya	Descriptive research design	The study found that profitability, liquidity, collateral and inventory indicate a positive, significant effect on the SMEs trade Credit	The study did not analyze effect of trade credit variables on financial performance	The current study focus was to fill the gap by establishing the relationship of trade credit and financial performance of supermarkets through analyzing of the variables

2.4 Conceptual Model

This conceptual framework provides the understanding of the relationship between the trade credit and financial performance of supermarkets. From the below diagram of conceptual framework, we can gather that the study investigates the relationship between trade credit to financial performance of supermarkets. Trade credit is the independent variable categorized into trade payables and trade receivables and financial performance is the dependent variable which is measured by ROA.

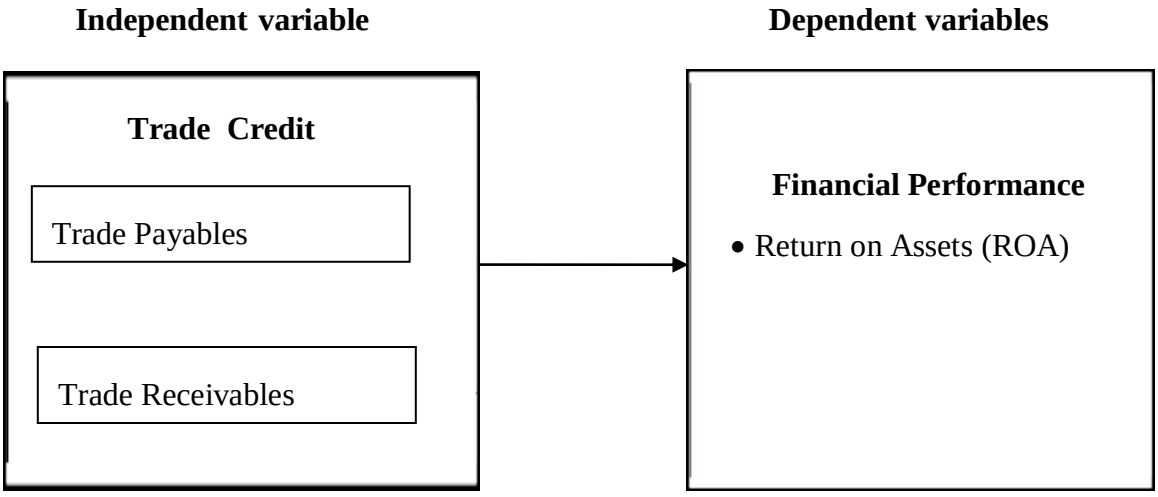


Figure 2.1: Conceptual Model

2.5 Chapter Summary

Chapter two has discussed relevant literature as presented by various scholars in relation to various studies in the study. It first identified key theories on which the study is anchored including. The chapter further presented a detailed analysis of study association among the variables. The chapter then presented a detailed conceptual framework identifying the independent and dependent variables. Finally, the chapter has presented the conceptual hypotheses that were tested in the study.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology adopted for the study. It focused on identification of the research design, target population, sampling design and procedure, data collection instrument, data collection procedure, data analysis, and ethical considerations. The chapter also referred to research studies on appropriate methods for this study. They included Mugenda and Mugenda (2003) as well as Saunders, Lewis and Thornhill (2009. The study aimed at formulating a set of recommendations which is the paradigm within which most business and management research operates (Flowers, 2009) and it was found to be problem-oriented in approach. The key assumption was that organisations are rational entities, in which rational explanations offer solutions to rational problems.

Further the chapter presented the population of the study including data collection. Data validation and reliability are dicussed in this chapter. Operationalization of the research variables namely trade payables, trade receivables and financial performance are discussed in this section. Finally, the chapter presented detailed data analyses which included descriptive statistics and regression analyses.

3.2 Research Philosophy

The study was inclined to the positivist philosophical paradigm. The philosophical foundations of knowledge upon which assumptions and predispositions of a study are commonly based are positivism and phenomenology, being the two extremes with a wide continuum in between. According to Saunders et al. (2007) phenomenology is considered a subjective paradigm while positivism is viewed as an objective orientation.

The foregoing philosophical orientations are defined by ontological and epistemological assumptions, the human nature and methodological assumptions. Cooper and Schindler (2006) argue that positivism assumes a perfect quantitative approach to exploring nature. Saunders et al. (2007) posit that positivism paradigm is premised on objective reality

assumption, the objectivity of which is without regard to human conduct and that there is not a construction of the mind. Hence, positivists pursue causes of social phenomena with little concern for the subjective conditions of respondents. This philosophy considers that universal scientific propositions are true only if they can stand the empirical tests.

A researcher guided by this philosophy concentrates on evidences, pursues causality and essential patterns, condenses nature to its most basic elements, develops hypotheses, and subjects those conjectures to empirical tests (Saunders, Lewis, & Thornhill, 2007). The proposed study is inclined towards a positivist research philosophy because it is based on existing body of knowledge. The postulations of upper echelons, environment dependence, and expectancy theories on the relationship between the study variables have been reviewed.

3.3 Research Design

The plan used to guide a scientific inquiry for it to address the underlying problem is called study design. A study design is important since it enhances the objectivity of the process and ensures it meets its objectives. The three general forms of research design are descriptive, causal, and exploratory study designs. This study proposed to use descriptive cross-sectional design. According to Cooper and Schindler (2011), cross sectional studies are carried out once. Data about the subjects that was collected is a representation of the situation about them in light of the study variables at that particular instant.

The study design was envisaged to offer the researcher an opportunity to collect data across different supermarkets in Machakos County and empirically test the relationship of the constructs along its conceptualization. In view of the breadth of the study, cross-sectional survey allows the researcher the opportunity to collect data on each of the variables, namely: trade credit and financial performance. The data collected was analyzed quantitatively to confirm or refute the hypotheses.

3.4 Population

Population is a large collection of element, objects or individuals forming the central attention of a study (Castillo, 2009). Cooper and Schindler (2011) states that universe is an entirety of individuals, events or objects having homogeneous attributes that comply with a defined specification. The individuals or objects must be having similar observable characteristics (Cooper et al., 2011). The target population of this study was all the five large supermarkets in Machakos County.

Homogeneity of the population facilitates generalization of the study findings. The supermarkets in Machakos County are considered homogeneous because they are within the same operating environment. The context was chosen because according to literature, there is prevalent manifestation of the variables in this study: trade credit and financial performance. The supermarkets in Machakos County were specifically targeted for the study as they represent key sectors of the retail sector and because of conformity to regulatory requirements and other legal requirements; there was availability of reliable and objective financial and economic performance data on these companies. Literature review also shown that the variables are examinable in the supermarkets in Machakos County.

3.5 Operationalization and Measurement of Variable

Operationalization refers to the process of denoting numbers or numerals and any other symbols to the study. It explicitly specifies variables in a manner that facilitates measurement of variables (Sekaran, 2006).

Table 3.1: Operationalization of Study Variables and Measurement

Objective	Variables	Indicators	Measurement	Measuring Scale	Research Approach	Type of Statistical Analysis	Tool of Analysis
Do determine the influence of trade payables on financial performance of supermarkets in Machakos County	Dependent Variable: Financial Performance	Return on Assets (ROA)	Computation of Return on Assets	Ratio	Quantitative	Parametric	Descriptive Analysis
	Independent Variable: Trade Payables	Outstanding Accounts Payable	Computation of outstanding Trade Payables	Ratio	Quantitative	Parametric	Pearson's Correlation and Linear Regression
Do determine the influence of trade receivables on financial performance of supermarkets in Machakos County	Dependent Variable: Financial Performance	Return on Assets (ROA)	Computation of Return on Assets	Ratio	Quantitative	Parametric	Descriptive Analysis
	Independent Variable: Trade Receivables	Outstanding Accounts Receivable	Computation of outstanding Receivable	Ratio	Quantitative	Parametric	Pearson's Correlation and Linear Regression

3.6 Data Collection Techniques

The study used secondary data only. The data was collected from past financial statements of the supermarkets, obtained from the individual supermarkets. The relevant data extracted from the statements included trade credit variables; trade receivables and trade payables and financial performance as measured by ROA.

3.7 Data Analysis Techniques

Data collected was examined and checked for completeness and comprehensibility after which it was summarized, and tabulated. In this regard, the following violations of regression assumptions were tested: skewness; multicollinearity; and heteroscedasticity. Since regression analyses assume that variables have normal distribution, the assumption will be tested by use of both graphical and numerical diagnostics. Graphical tests will use

both histograms and probability-probability (p-p) plots. On the other hand, numerical tests will use Shapiro Wilk's diagnostic which is normally used on samples n=3 to 2000.

Multicollinearity occurs whenever more than one of the predictors in a regression model are temperately or highly correlated. One of the methods of testing for multicollinearity is through the examination of the variance inflation factors (VIF); an indicator of the impact of collinearity among the variables in a regression model. It is always greater than 1, and values greater than 10 are normally considered as indicators of significant multicollinearity and unstable beta coefficients. The proposed study will therefore use VIF to undertake multicollinearity diagnostics. The outcome of the VIF tests will also be counter-checked with the examination of correlation matrix where any correlation coefficient greater than 0.5 will be an indicator of significant multicollinearity between the variables concerned.

A multiple regression model was used to determine the relationship between the tested variables. Statistical package for social sciences (SPSS), version 23 was used for the analysis. The regression model is as shown below, and test of significance was done at 5% threshold:

$$FP = B_o + B_1TP + B_2TR + \varepsilon$$

Where:

FP	=	Financial Performance (measured by ROA)
TP	=	Trade Payables
TR	=	Trade Receivables
B_o	=	Regression constant
B_1, B_2	=	Beta coefficients
ε	=	Error Term

3.8 Validity and Reliability

Reliability is referred to the stability of findings, whereas validity is represented the truthfulness of findings [Altheide & Johnson, 1994]. Annals of Spiru Haret University, 17(3): 58-82 2. Validity and reliability increase transparency, and decrease opportunities to insert researcher bias in qualitative research [Singh, 2014]. For all secondary data, a detailed assessment of reliability and validity involve an appraisal of methods used to collect data [Saunders et al., 2009]. These are important concepts in modern research, as they are used for enhancing the accuracy of the assessment and evaluation of a research work [Tavakol & Dennick, 2011]. Without assessing reliability and validity of the research, it will be difficult to describe for the effects of measurement errors on theoretical relationships that are being measured [Forza, 2002]. By using various types of methods to collect data for obtaining true information; a researcher can enhance the validity and reliability of the collected data.

International financial reporting standards (IFRS), International accounting standards (IAS), and General accepted accounting principle (GAAP) are set by the International accounting standards (IAS) Board and are used primarily by publicly accountable companies—those listed on a stock exchange and by financial institutions, such as banks. Authoritative interpretations of the Standards, which provide further guidance on how to apply them, are developed by the IFRS Interpretations Committee and called IFRIC Interpretations. The Board has also developed the IFRS for small and medium sized enterprises (SMEs) Standard, which is used by small *an*d medium-sized companies without public accountability (IFRS).

Validity is the test for precision, it is the extent to which an instrument measures what it asserts to measure (Robson, 2011). The subject matter for the analysis was the original accounting reports and financial statements generated by the companies over a five year period. The observed data, reports made by the firm and standards reviewed imposed by the auditor, matched thus the auditor signed it off as passed, that is, confirmed the

asserted statements in the financial statements by using the generally accepted principles and methods in accounting .

Reliability is a test for reproduction. It is defined as the ability of a measure to remain the same over time despite uncontrolled testing conditions or respondent themselves. It refers to how much a person's score can be expected to change from one administration to the next [Allen & Yen, 1979]. Test-retest reliability is obtained by repetition of the same measure on a second time [Graziano and Raulin, 2006]. This assesses the external consistency of a test [Allen & Yen, 1979]. The accounting reports and financial statements generated by the company were audited by the company's internal auditor and subsequent reviewed and ascertained by external independent auditors as conforming to the same accepted principles and methods in accounting.

3.9 Ethical Considerations

A permit from NACOSTI was obtained prior to implementation of the study, university clearance letter, transmittal letters prior to undertaking field research. The challenge of many researchers lies mainly in the manner in which they relate to their external environment, and as Berg (2009) puts it:

> *"Perhaps to a greater degree compared to the average citizen, social scientists do have an ethical obligation to their study universe, their colleagues, as well as the larger society. This isbecause social scientists delve into the social lives of other human beings. From such delving into private social lives, policies, practices, and laws may emanate. Accordingly, social researchers ought toassure the protection of privacy, rights, as well as welfare of the communities and persons forming the focus of their research"* (Berg, 2009).

Various strategies have been put in place to ensure ethical standards in the current study. For example, transmittal letters were written to the respondents seeking authority to used data obtained from the respective firms, in which case non-disclosure and confidentiality commitments were made. Ethics refer to the standards or norms of conduct considered

important by the society and that guide moral judgement about study behavior (Cooper & Schindler, 2006).

Mugenda (2008) notes that ethical standards also entail virtues of compassion, empathy and honesty when handling subjects or other living beings in a study. Just like Mugenda empasizes on honesty, this study ensured that all in-text citations were duly acknowledged. The Turnitin software was also used in order to check for plagiarism and hence correct the detected anomalies.

4.0 Chapter Summary

The chapter gives an explanation on the research design used in the study, reserch philosophy and the population involved. It also gives an explanation on operalization and measurement of variables, data analysis ,validity and reliability of instruments used as well as ethical issues in the study.

CHAPTER FOUR

DATA ANALYSIS, RESULTS, AND FINDINGS

4.1 Introduction

This chapter presents the actual data analysis, the results of from the analysis, as the findings. Consistent with the study objective, as well as the conceptual and analytical models, this chapter involves a detailed presentation on the descriptive statistics as well as regression output. Whereas the former entails measures of central tendency and dispersion, the latter involves a detailed presentation of the model summaries, the analyses of variance (ANOVA), as well as the model coefficients. It is based on the foregoing analytical output that the findings have been communicated.

4.2 Diagnostic Tests

The study used linear regression analysis method. According to Sekaran (2011), linear regression method is not robust to violations of normality, multicollinearity, and linearity assumptions. The data was there therefore subjected to various diagnostic tests.

4.2.1 Test for Normality of Research Data

The study used Kolmogorov-Smirnov (KS-test) and Shapiro-Wilk test (SW-test) to ascertain that data was normally distributed since this is one of the assumptions of linear regression analysis. This test for normality was introduced by Shapiro and Wilk (1965) for a complete sample. Razali and Wah (2011) posit that normal distribution of data is a key assumption of many statistical procedures including t-tests, and linear regression analysis, discriminant analysis, as well as the analysis of variance.

They further argue that validity and reliability of statistical inferences are greatly compromised when normality assumption is violated. The most commonly used tests for normality include graphical methods (histograms, box plots, quartile-quartile); numerical methods (skewness and kurtosis indices); and the formal normality tests. There are four formal tests for normality, namely: Shapiro-Wilk test, Kolmogorov Smirnov test, Lillierfors test, and Anderson Darling test. The Shapiro-Wilk test is the most powerful,

followed by Anderson-Darling test, Lillierfors test, and Kolmogorov-Smirnov test. Nevertheless, all the four formal tests for normal distribution of data are not robust to small samples. The concept of normality has been argued to be important when applying most statistical techniques. In this regard, many statistical operations such as correlation, regression, analysis of variance, and other parametric tests assume that the population from which the sample was drawn displays normal distribution of characteristics. The normality assumption should be taken seriously; otherwise, it would be difficult to draw an accurate and reliable conclusion about reality.

The commonly used tests for normality are Kolmogorov-Smirnov test, Anderson Darling test, and Shapiro Wilk test. Shapiro Wilk test is more appropriate for small samples (less than 50 elements), if the p-value of Shapiro Wilk test is greater than 0.05, then the data is normal. If the p-value is less than 0.05, then it significantly violates the normal distribution assumption. The results of Kolmogorov-Smirnov and Shapiro-Wilk tests are shown in Table 4.1 below.

Table 4.1 Results of Kolmogorov Smirnov and Shapiro Wilk Tests

	Kolmogorov-Smirnov[a]		Shapiro-Wilk	
	Stat	Sig.	Stat	Sig.
Financial Performance	0.128	0.000	0.956	0.000
Trade Payables	0.111	0.000	0.963	0.000
Trade Receivables	0.148	0.000	0.947	0.000

The results in Table 4.1 above show that financial performance, trade payables, and trade receivables. This is because each had a p-value less than 0.05.

4.2.2 Test for Multicollinearity

The variables in study were subjected to the multicollinearity tests. According to Asteriou and Hall (2007), multicollinearity is caused by inter-correlation among the explanatory variables. They also argue that the most logical way to test for multicollinearity problem is to obtain correlation coefficients between pairs of explanatory variables. In this study,

both correlation coefficients (through correlation matrix), and variance inflation factors (VIFs) were examined for significant multicollinearity problem. Any VIF values exceeding 10 are usually indicator of significant multicollinearity. Otherwise, multicollinearity problem is insignificant. The results were as shown in Table 4.2.

Table 4.2 Collinearity Statistics

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.659	0.181		14.671	0.000		
Financial Performance	0.216	0.039	0.413	5.613	0.000	0.416	2.402
Trade Credit	-0.132	0.068	-0.163	-1.933	0.055	0.316	3.166

From Table 4.2, all the variance inflation factor (VIF) values were below 10. This implies that there was no significant multi-collinearity between the variables in the study.

4.3 Descriptive Analysis

The central tendency and dispersion statistics were used. The central tendency measured the extent to which the data on each variable were concentrated at a central point while dispersion measured the degree to which the data were spread out from the convergent point. The central tendency was measured by the mean while dispersion was measured by the standard deviation. Table 5 presents the findings of the study with respect to the descriptive analytics.

Table 4.3 Descriptive Statistics

Variable	N	Mean	Std. Deviation
Return on Assets	60	0.1774	0.1959
Trade payables	60	0.1241	0.0209
Trade receivables	60	0.0955	0.0119

From Table 4.3 financial performance had a minimum of nil, implying that at least one firm had recorded zero profit change over the period. The ROA was 60%, implying that at least one firm did a ROA of 60% over a similar period. This represented a ROA range of 0.662. The mean of ROA was 0.1774, representing 17.74%. This implies that the ROA among the firms tended towards 17.74%. The standard deviation was 0.1959, representing 19.59% deviation about the mean.

From the data collected, trade payables had a minimum of 0.1057, meaning that the lowest trade payables over the period under review was 10.57%. The highest trade payables stood at 0.1812 representing 18.12% trade payables over the period 2013-2017. This represented a range of 0.0755, representing 7.55%. The mean for trade payables was 0.1241 representing 12.41% as indicated on table 4.3 above. This implies that the trade payables, although volatile, tended towards 12.41% mark over the period under examination. The trade payables variance was negligible, while the standard deviation was 0.0209, representing 2.09%.

Trade receivables had a minimum of 0.0850, meaning that the lowest trade receivables was 8.5% during the five year period. The highest trade receivables was 0.1150 over a similar period, representing 11.5%. The trade receivables range was therefore 0.0300, representing 3.0% difference between the highest and lowest trade receivables. The trade receivables had a negligible variance, and a standard deviation of 0.0119 representing 1.19%. This standard deviation was about the mean of 0.0956, representing 9.56%.

4.4 Regression Analysis

The study sought to determine the relationship of trade credit on financial performance of supermarkets in Machakos County. The coefficients of determination were used to bring out the extent to which each of the two independent variables explained the dependent variable. The model summary was used to determine the degree to which the two independent variables jointly explained financial performance among the firms.

The study sought to determine the joint influence of trade receivables, and trade payables on financial performance of the supermarkets in Machakos County. The objective was met by regressing financial performance on trade receivables, and trade payables.

4.4.1 Regression of Trade Payables and Financial Performance

The study sought to determine the influence of trade payables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The results are presented in Tables 4.4 and 7 below.

Table 4.4 Model Summary for Trade Payables and Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.275[a]	0.076	0.070	0.26647

a. Predictors: (Constant), Trade payables

From Table 4.4 above, R=0.275, and R^2 = 0.076. The degree and nature of relationship between the two variables was measured using "R". The correlation between the two variables was 0.275. This implies that a unit increase in trade payables would lead to 27.5% increase in financial performance. The extent to which trade payables explained financial performance was measured by the adjusted "R^2". In this regard, trade payables explained only 7.0% of financial performance.

Table 4.5 Model Coefficients for Trade Payables and Financial Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.571	0.252		10.193	0.000
	Trade Payable	0.225	0.064	0.275	3.520	0.001

a. Dependent Variable: Financial Performance

The results in Table 4.5 reveal that trade payable had statistically significant relationship with financial performance (β=0.225, t=3.520, p=0.001<0.05). Based on the findings, it can be concluded that trade payable influences financial performance.

Using the statistical findings, the regression model can be substituted as follows:

FP = 2.571 + 0.225TP

Where:

FP – Financial Performance

TP- Trade Payable

4.4.2 Regression of Trade Receivables and Financial Performance

The study sought to determine the influence of trade receivables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The results are presented in Tables 8 and 9 below.

Table 4.6 Model Summary for Trade Receivables and Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.223[a]	0.050	0.043	0.27023

a. Predictors: (Constant), Trade receivable

From Table 4.6, the degree and nature of correlation between trade receivable and financial performance was determined by the "R". This demonstrates that a unit increase in trade receivables would lead to an increase in financial performance by 22.3%. Adjusted R^2 = 0.043 shows the extent to which trade receivables explained financial performance.

Table 4.7 Model Coefficients for Trade Receivable and Financial Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.681	0.277		9.680	0.000
	Trade receivable	0.194	0.069	0.223	2.806	0.006

a. Dependent Variable: Financial Performance

From table 4.7, the results indicate that trade receivable had statistically significant influence on financial performance (β=0.194, t=2.806, p=0.006<0.05). Based on the research findings, we conclude that trade receivable influences financial performance. Using the statistical findings, the regression model can be substituted as follows:

FP = 2.681+ 0.194TR

Where:

FP- Financial Performance

TR – Trade Receivables

4.4.3 Regression of Trade Payables, Trade Receivables and Financial Performance

The study sought to determine the joint influence of trade payables, and trade receivables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The results are presented in Tables 4.8, 4.9 and 4.10 below.

Table 4.8 Model Coefficients for Regression of TP, TR and FP

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	0.796[a]	0.634	0.477	0.0297882

a. Predictors: (Constant), trade receivables and trade payables
b. Dependent Variable: ROA

Table 4.8 demonstrates that the coefficient of determination, represented by the adjusted 'R square' was 0.477 representing 47.7%. This implies that the trade credit dimensions

jointly explained up to 47.7% of financial performance. This would mean that 52.3% of financial performance was explained by variables outside the model.

Table 4.9 Analysis of Variance for regression of TP, TR and FP

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.011	2	0.004	4.045	0.058[b]
	Residual	0.006	57	0.001		
	Total	0.017	59			

a. Dependent Variable: Financial Performance
b. Predictors: (Constant), trade receivables, and trade payables

From the ANOVA statistics in Table 4.9 the regression model had a fit with the data ($F=4.045$, $P < 0.01$). This is an indication that trade credit dimensions: trade receivables; and trade payables) had a significant influence on financial performance.

Table 4.10 Regression Model Coefficients for regression of TP,TR and FP

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.081	0.117		0.687	0.049
Trade payables	-0.100	0.569	-0.049	-0.175	0.037
Trade receivables	-0.380	0.778	-0.114	-0.489	0.045

a. Dependent Variable: Financial Performance

From Table 4.10 the established regression equation was

$FP = 0.081 - 0.049TP - 0.114TR$

From the above regression equation, it was revealed that if trade payables and trade receivables were each held constant, the financial performance would increase by 0.081 representing 8.1%. However, a unit change in each of the two trade credit dimensions: trade receivables, and trade payables, would lead to change in financial performance by

factors of -0.114, and 0.049 respectively. At 5% level of significance, trade payables, and trade receivables.

4.5 Discussion of Research Findings

The findings of the study were compared with prior theoretical and empirical evidence. Areas of consensus and those of lack of consensus were identified.

4.5.1 Relationship with the Theory

Transaction cost theory 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. This is premised on not majorly financing but reducing transaction costs. The findings of the current study are in support of this theoretical argument.

According to pricing theory, 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, Dasgupta, and Kim, 2004).

Liquidity theory postulates that 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). The study found no empirical evidence in support of this theoretical argument.
Sales promotion theory argues that 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 (Nadiri, 1969).

The prediction of verification theory rests on 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. Smith (1987) noted that trade credit reduces the information asymmetry between buyer and seller alleviating moral hazard problems between the firm and their customer, since it allows the customer to verify product quality before paying. The study adduced empirical evidence in support of this theoretical postulation.

The study set out to determine the influence of trade credit on financial performance of supermarkets in Machakos County. Descriptive and relationship analyses were done to achieve this objective. Descriptive statistics used include the mean, representing a measure of central tendency, and standard deviation, representing a measure of dispersion. This argument is consistent with the empirical evidence in this study.

The study determined that at least one organization had recorded zero profit change over the period under review, represented by nil financial performance change. This finding is consistent with that of Tang (2014) on how trade credit from both supplier side and demand side effects financial performance of the SMEs in Netherlands. The study found that trade credits (accounts payable) is positively associated to financial performance and that there is the need for SMEs to develop a long-term relationship with suppliers for them to access trade credit in an easier and a fast way. This theoretical argument is inconsistent with the findings of this study.

4.5.2 Relationship with Prior Empirical Evidence

The coefficient of determination of the current study, represented by the adjusted 'R square' was 0.477 representing 47.7%. This implies that the trade credit dimensions: trade receivables, and trade payables) jointly explained up to 47.7% of ROA. This finding is consistent with that of Ferrando and Mulier (2012) sought to determine if firms utilize trade credit in managing growth, the study used descriptive research design.

Two and half million observations from 600.000 companies in 8-euro countries in the period between 1993 and 2009 were used. The study found that firms utilizes trade credit in managing growth. Martínez-Sola, García-Teruel and Martínez-Solano (2010)

study carried for period between 2000-2007 to investigate the implications on profitability as a result of providing trade credit financing to customers, 11,337 Spanish manufacturing SMEs were sampled. The current study also revealed that if trade payables and trade receivables were each held constant, the financial performance would increase by 0.081 representing 8.1%. However, a unit change in each of the two trade credit dimensions: trade receivables, and trade payables, would lead to change in financial performance by factors of 0.772, -0.114, and 0.049 respectively. At 5% level of significance, trade payables, and trade receivables.

This finding compares with that of Kapkiyai and Mugo (2015) carried a study to investigate the impact of trade credit on the financial performance of small-scale businesses in Eldoret town, Kenya. This study looked at a sample of 50 audited small and medium enterprise companies using a descriptive research design. The study found a positive relationship between trade credit and firm's liquidity, and return on assets.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary, draws conclusion and unveils recommendations from the study findings. The summary, conclusion, and recommendations have been made based on the theoretical predictions, as well as the findings of prior studies. Various recommendations have also been made according to the scope of the study.

5.2 Summary of Findings

The influence of trade credit on financial performance was the main focus of the study. The joint effect of the two trade credit constructs was investigated. The individual influence of each of the three constructs on financial performance was also investigated. In this regard, summary of the study findings has been presented in this section based on the sets of relationships between and among variables.

The first specific objective of the study was to determine the influence of trade payables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The findings showed that trade payable had statistically significant relationship with financial performance ($\beta=0.225$, $t=3.520$, $p=0.001<0.05$). Based on the findings, it can be concluded that trade payable influences financial performance.

The second specific objective of the study was to determine the influence of trade receivables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The results indicate that trade receivable had statistically significant influence on financial performance ($\beta=0.194$, $t=2.806$, $p=0.006<0.05$). Based on the research findings, we conclude that trade receivable influences financial performance.

The third objective of the study was to determine the joint influence of trade payables, and trade receivables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The findings revealed that the coefficient of determination, represented by the adjusted 'R square' was 0.477 representing 47.7%. This implies that the trade credit dimensions jointly explained up to 47.7% of financial performance. This would mean that 52.3% of financial performance was explained by variables outside the model.

This is an indication that trade credit dimensions: trade receivables; and trade payables had a significant influence on financial performance. It was revealed that if trade payables and trade receivables were each held constant, the financial performance would increase by 0.081 representing 8.1%. However, a unit change in each of the two trade credit dimensions: trade receivables, and trade payables, would lead to change in financial performance by factors of 0.772, -0.114, and 0.049 respectively. At 5% level of significance, trade payables, and trade receivables.

5.3 Conclusion

The first specific objective of the study was to determine the influence of trade payables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The findings revealed that trade payable had statistically significant relationship with financial performance. Based on the findings, we conclude that trade payable influences financial performance. This could be attributed to the increased sales volumes coupled with efficient collection strategies.

The second specific objective of the study was to determine the influence of trade receivables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The results indicate that trade receivable had statistically significant influence on financial performance. Based on the research findings, we conclude that trade receivable

influences financial performance. This could be attributed to the increased sales volumes coupled with efficient collection strategies.

The third objective of the study was to determine the joint influence of trade payables, and trade receivables on financial performance of supermarkets in Machakos County. Data was obtained from secondary sources and analysis was done using linear regression method. The findings revealed that trade payables and receivables jointly influenced financial performance. This is attributable to the enhanced sales volumes due to the trade credit facilities.

5.4 Recommendations

This section comprises recommendations of the study based on the findings. The recommendations are in light of policy and practice. The supermarkets, suppliers, and all other players in the trade credit management should organize their value chains and production plans to ensure sound trade credit management through integrating their supply chains to ensure seamless management of the same.

5.4.1 Recommendations for Policy

The recommendations for policy are as follows: The study has established that trade payables significantly influences financial performance. This implies that more Policies governing the implementation of the trade credit facilities and trade credit management ought to be enhanced by the government agencies such as Ministry of Trade and industrialization, Competition Authority of Kenya and consumer protection agencies in order to achieve better performance results in the retail sector. This includes but not limited to defaulters information sharing and blacklisting and controlling and encouraging of levels of credit through tax incentives

The study demonstrated that trade credit generally influenced financial performance. This implies that trade credit management should be given policy attention as a strategy to enhance their success, more so in Machakos County that was the context of the current study.

5.4.2 Recommendations for Practice

The supermarkets, suppliers, and all other players in the trade credit management should organize their value chains and production plans to ensure sound trade credit management. They should more so integrate their supply chains to ensure seamless management of the same. The study revealed that trade credit significantly influences financial performance. This means that the relevant regulatory bodies and other institutions charged with oversight responsibilities such as the Central Bank of Kenya, Competition Authority, and all consumer protection agencies should commit significant time and resources to streamline the trade credit practices.

5.5 Suggestions for Further Research

The study recommends further investigation focusing on various moderating and intervening factors such as firms' attributes since this was not within the scope of the current investigation. Some of the attributes that the study suggests for examination include size, age, and corporate governance. This is because some prior studies have reported mixed findings, with a few inconsistencies with the findings of the current investigation. In this regard, a few scholars have tentatively attributed the inconsistencies to possible moderating and intervening influences.

The study also suggests further research focusing on other micro and macroeconomic factors not modelled in the current investigation. This is because of the multiplicity of these factors, and hence the impracticality of exhausting them in one study. A study is also suggested focusing on supermarkets in other parts of the country, since they comprise a significant portion of the GDP, and yet little is known about their financial performance dynamics. The study also recommends that the academics and researchers in the field of Finance and Economics should work in collaboration with policy makers and practitioners in an effort to steer growth of organizations through consumption of the research findings.

Further research is also recommended focusing on non-economic macro factors such as legal, political, and cultural to determine their influences on the financial performance of

various firms, listed or otherwise. This is because literature stream has been quite emphatic on their influences in the performance of various organizations, yet research in the field of Finance has not given them significant attention.

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APPENDICES

Appendix I: Time Plan

Activity																		
Month	Sept/Oct				Nov/Dec				Feb to April				April-May				June-Aug	
Week	1	2	3	4	1	2	3	4 1	2	3	4 1	2	3	4	1	2	3	4
Meeting with Supervisor																		
Draft Proposal Writing																		
Proposal defense																		
Corrections on Panel Comments																		
Data Collection																		
Data Analysis																		
Report Writing																		
Final Draft and Research Submission																		

Appendix II: Financial Plan

S/No.	Votes	Description	No. of Units	Cost per Unit/Month/ Person (KShs)	Total Cost
1	Data Collection	Travel Costs (Local) Traveling expenses (visits to various institutions and libraries to gather information)	2 months	1,000 per month	2,000
		Local conferences and workshops	1 day	4,000 per day	4,000
		My night out expenditure (As per my normal rate	1 week	1500 per night	10,500
		Payment (Reward) for my research assistants	2Research assistant for 3 Weeks	500 per person per day	21,000
2	Stationery & printing expenses	Photocopy Papers Internet surfing expenses Printing expenses Cartridge to facilitate printing	4 Rims 3 months	500 2000 1,000 6, 000	2,000 6000 5,000 6, 000
3	Text Books and Journals			5, 000	5, 000
Total					**61,500**

Appendix III: Data Collection Sheet

	Year 1	2	3	4	5
Variable (Independent)					
Trade Payable					
Trade Receivable					
Dependent Variable (FP)					
Net Profit					
Total Assets					

Appendix IV: Authorization Letters

ST. PAUL'S UNIVERSITY

Private Bag 00217 LIMURU, KENYA
Email: postgraduatestudies@spu.ac.ke
Website: www.spu.ac.ke

Tel Office: +254 (0) 20-2020505/10
Mobile: +254 (0) 728-669000
(0) 728-062420
(0) 736-424440

BOARD OF POSTGRADUATE STUDIES

National Commission for Science, Technology and Innovation
Off Waiyaki Way, Upper Kabete
P.O Box 30623, 00100
Nairobi, KENYA.

Dear Sir/Madam,

RE: KOMBO GEORGE MUMO - MBAMKS457417

This is to confirm that the above named is a final year student of St. Paul's University registered for Master of Business Administration.

The final year consists of a major research work leading to a dissertation comprising 20,000 words. The student's selected topic is:

THE RELATIONSHIP BETWEEN TRADE CREDIT AND FINANCIAL PERFORMANCE OF SUPERMARKETS IN KENYA

The research will take place in MACHAKOS County from March 2019 to May 2019.

Kindly grant the student the required permit.

Yours Faithfully,

Dr. Sammy Githuku
Director, Postgraduate Studies

BOARD OF POSTGRADUATE STUDIES ST. PAUL'S UNIVERSITY 28 FEB 2019 KENYA P.O. PRIVATE BAG

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/34049/28760**

Date: **3rd April 2019**

George Mumo Kombo
St. Pauls University
P.O. Private Bag - 00217
LIMURU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"The relationship between trade credit and financial performance of supermarkets in Kenya: Evidence of Machakos county."*** I am pleased to inform you that you have been authorized to undertake research in **Machakos County** for the period ending **1st April, 2020.**

You are advised to report to **the County Commissioner and the County Director of Education, Machakos County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Machakos County.

The County Director of Education
Machakos County.

THE PRESIDENCY

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: 21009 and 21983 – 90100
Email Address:countycommasaku@gmail.com
Fax No. 044-21999

OFFICE OF THE
County Commissioner
P.O. Box 1 - 90100
MACHAKOS.

When replying please quote:

REF NO.CC/ST/ADMS/9VOL.1/86 **DATE:** 9th May, 2019

The Deputy County Commissioner
MACHAKOS SUB COUNTY

RE: AUTHORIZATION RESEARCH – GEORGE MUMO KOMBO

The National Commission for Science, Technology and Innovation has authorized the below named researcher to carry out a research on ***"The relationship between trade credit and financial performance of supermarkets in Kenya: Evidence of Machakos County"*** in Kenya for the period ending **1st April, 2020.**

Please be notified and accord him the necessary assistance.

ELIJAH OMOYO
For: COUNTY COMMISSIONER
MACHAKOS

COUNTY COMMISSIONER
MACHAKOS
P.O. Box 1 MACHAKOS

MINISTRY OF EDUCATION
STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

Telegrams: **"SCHOOLING"** Machakos
Telephone: Machakos (
Fax: Machakos
Email –cdemachakos@yahoo.com
When replying please quote

OFFICE OF THE
COUNTY DIRECTOR OF
EDUCATION
P.O. BOX 2666-90100,
MACHAKOS

MKS/ED/CDE/R/4/VOL.3/44 **13th May, 2019**

George Mumo Kombo
St. Pauls University
P.o Private Bag - 00217
LIMURU.

RE: RESEARCH AUTHORIZATION.

Reference is made to the letter from National Commission for Science, Technology and Innovation Ref: **NACOSTI/P/19/34049/28760** dated **3rd April, 2019.**

You are hereby authorized to carry out your research on, **"The relationship between trade credit and financial performance of supermarkets in Kenya: Evidence of Machakos County Kenya"** for a period ending **1st April, 2020**.

COUNTY DIRECTOR OF EDUCATION
MACHAKOS
10 MAY 2019
MINISTRY OF EDUCATION
Box 2666-90100 MACHAKOS

NANCY AFANDI
FOR: COUNTY DIRECTOR OF EDUCATION
MACHAKOS