

**EFFECT OF CREDIT MANAGEMENT PRACTICES ON THE  
PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN  
THE TRANSPORT AND LOGISTICS INDUSTRY IN NAIROBI,  
KENYA.**

**BY**

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## **DECLARATION**

I hereby declare that this research project is my original work and it has not been submitted to any other college or university for academic credit.

Signature ..... Date.....

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

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## DEDICATION

Jeremiah 29:11, “For I know the plans I have for you, declares the Lord, plans to prosper you and not to harm you, plans to give you hope and a future”, I dedicate this project to my God who has always been faithful and opened up doors for me that I never thought existed. Indeed, it has come to pass.

To my mum, Mrs P.S. Deche, my rock, my greatest cheer leader. Thank you for believing in me and encouraging me to be the best that I can be. “Usome yale yote yenye sikuweza kusoma”, you always said.

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**TABLE OF CONTENTS**

**DECLARATION..... ii**

**ACKNOWLEDGEMENT ..... iii**

**DEDICATION..... iv**

**LIST OF TABLES ..... vii**

**LIST OF ABBREVIATIONS ..... viii**

**ABSTRACT..... ix**

**CHAPTER ONE ..... 1**

**INTRODUCTION..... 1**

    1.1 Background ..... 1

    1.2 Research Problem..... 7

    1.3 Research Objectives ..... 8

    1.4 Value of the Study..... 8

**CHAPTER TWO ..... 10**

**LITERATURE REVIEW ..... 10**

    2.1 Introduction ..... 10

    2.2 Theoretical Literature..... 10

    2.3 Empirical Literature ..... 15

    2.4 Chapter Summary and Gaps..... 21

**CHAPTER THREE ..... 22**

**RESEARCH METHODOLOGY ..... 22**

    3.1 Introduction ..... 22

    3.2 Research Design..... 22

    3.3 Population..... 22

    3.4 Sample..... 23

    3.5 Data Collection..... 23

    3.6 Data Analysis ..... 24

**CHAPTER FOUR..... 25**

**DATA ANALYSIS AND FINDINGS..... 25**

    4.1 Introduction ..... 25

    4.2 Demographic Analysis ..... 26

4.3	Credit Management Practices.....	29
4.4	Credit Management Practices and Performance .....	31
<b>CHAPTER FIVE .....</b>		<b>37</b>
<b>SUMMARY, CONCLUSION, AND RECOMMENDATIONS .....</b>		<b>37</b>
5.1	Introduction .....	37
5.2	Summary .....	37
5.3	Conclusion.....	38
5.4	Recommendations .....	38
5.5	Suggestions for Further Research .....	39
<b>REFERENCES.....</b>		<b>40</b>
<b>APPENDICES .....</b>		<b>44</b>
Appendix I:	Research Questionnaire .....	44
Appendix II:	List of Transport and logistics Companies in Nairobi.....	47

## **LIST OF TABLES**

Table 4.1:	Title of respondents.....	26
Table 4.2:	Gender of respondents .....	26
Table 4.3:	Length of time the company has been operational .....	27
Table 4.4:	Respondents' highest levels of education .....	27
Table 4.5:	Whether the respondents have any professional training .....	27
Table 4.6:	Markets served by the business.....	28
Table 4.7:	Local or foreign ownership.....	28
Table 4.8:	Family or non-family business.....	28
Table 4.9:	Are you directly responsible for credit management in the organisation? .	29
Table 4.10:	Do you have any other person responsible for credit management? .....	29
Table 4.11:	Do you possess certification in credit management?.....	30
Table 4.12:	How often does your business extend credit sales to clients? .....	30
Table 4.13:	Credit management practices adopted by transport & logistics companies	31
Table 4.14:	Performance of transport and logistics companies .....	31
Table 4.15:	Correlation matrix .....	33
Table 4.16:	Regression models .....	34

## **LIST OF ABBREVIATIONS**

CEO	Chief Executive Officer
CI	Confidence Interval
CRB	Credit Reference Bureau
EAC	East African Community
GDP	Gross Domestic Product
GMM	Gaussian Mixture Model
GPT	General Purpose Technology
JKIA	Jomo Kenyatta International Airport
LP	Long Play
OLS	Ordinary Least Squares
PwC	PriceWaterhouse Coopers
R&D	Research & Development
ROI	Return on Investment
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
US	United States of America

## ABSTRACT

The failure rate of SMEs globally is estimated by experts to be between 70 and 80 percent. It is substantially higher for countries in sub-Saharan Africa. Most Kenyan transport and logistics companies have been unable to maintain that balance due to the competitive nature of the industry and hence some of the companies have been forced to close shop or downsize. Thus, their survival rate has tended to worsen and credit management may be one of the courses of such low survival rates of these firms. The objectives of this study were to examine the credit management practices of SMEs in the transport and logistics sector and to establish the effect of credit management practices on the performance of SMEs in Nairobi County, Kenya. This study adopted a descriptive design. The population of the study was 1,133 transport and logistics companies within Nairobi. Simple random sampling technique was used to select a sample of 287 firms for the study. Primary data was collected via a questionnaire designed based on the objectives of the study. The sampled target respondents were managers/owners of the transport and logistics companies. Face to face interviews were conducted. Descriptive analysis was used to summarize some of the initial results especially the demographics as well as to analyze objective one. OLS regression analysis was used to analyze objective two. The study revealed that the most common credit management practice was checking customer credit worthiness before granting trade credit followed by offering discounts for early payment and use of customer's audited accounts to extend trade credit. As to the relationship between credit management practices on performance, the results were mixed. No single practice had a uniform and stable effect on all the four parameters of performance used in the study. For instance, checking credit worthiness of customer before extending credit had a negative effect on sales volume and sales growth while it had a positive effect on financial results and ROI. The use of CRB to check for credit worthiness before extending credit had positive effects on sales growth and volume but negative effects on financial results and ROI. The study concludes that transport and logistics companies in Nairobi employ very limited credit management practices. The study also concludes that while the relationship between credit management practices and performance is mixed in this study, there is a pattern emerging where when credit management practices lead to an improvement in sales (volume and growth), it negatively impacts the overall performance of the firm (financial results and ROI). This is true for all the credit management practices used in this study except for customization according to solvency risk, credit insurance for sales, and conducting formal analysis for reasons for late payment. The study recommends as follows. First, the transport and logistics companies in the SME sector should embrace better credit management practices by employing qualified personnel to be in charge of credit management. Secondly, the transport and logistics companies in the SME sector should decide, at a strategic level, what is important between better sales or better overall performance of the firms. Lastly, it is important that other firms borrow from the results of this study for practical purposes. Further, for policy purposes, it is important that employees be trained and certified in credit management in order to improve this important discipline in institutions.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

There has been an increasing attention towards small and medium enterprises (SMEs) from scholars and practitioners globally in the recent past due to their significant contribution to economies in both developing and developed economies (Asiedu & Freeman, 2007). They are a backbone of many economies. In Europe, for instance, SMEs accounted for almost 85% of net new jobs by 2010 (Uwonda, Okello, & Okello, 2013). This is also true in the United States where in 2012, the SMEs accounted for almost half the number of employees in the economy. According to Caruso (2015), 51.9 percent of all employees were employed by large businesses while the rest were divided between very small enterprises, small enterprises and medium enterprises. Thus, about 56.1 million people were employed by the SMEs in the US by 2012 census data. This is more than double the number that were employed by the SMEs in US by 2004 according to Kozlow (2006). Currently, SMEs in US contribute to over half of non-farm GDP.

Other than Europe and US, SMEs also play an important role in Asia especially in creating employment for the masses and as a source of economic growth. SMES are also a source of foreign currencies in Asian countries. For instance in Indonesia, SMEs are important for creating employment, generating foreign currencies via exports to other countries in Africa, America, and Europe, as well as their ability to grow into larger enterprises through internationalization (Tambunan, 2009). In India, SMEs create the highest employment to the masses through industries accounting for the highest employment growth and share of industrial production and exports (Kumar, 2014).

Nowhere else are SMES as important as they are in Africa. SMEs are the biggest job creators in all African economies and an engine of national economic growths. They are also touted as the seeds of big businesses playing the role of suppliers of large enterprises in Africa. However, small businesses are not only suppliers but also consumers of products (Abor & Quartey, 2010). In the national economies in Africa, SMEs account for half of the GDP; are more productive than large companies, innovate more, have more impact on social and cultural issues, and play a major part in the future of Africa's economic growth (Uwonda et al., 2013).

SMEs play a significant role in East Africa through alleviation of poverty and participation in the global economy through import-export trade. This has helped develop the national economies. For example, SMEs account for about 90% of the private sector in Kenya. They are also a major source of employment and wealth creation to the masses especially the women and youth and unskilled or low-skilled workers. They are also a major contributor to tax revenues and are supplies to larger corporations in terms of supply of goods and services (Ernst & Young, 2009).

### **1.1.1 Credit Management in SMEs**

Credit (or trade credit) management is the center of a business entity for both short and long-term survival. Credit management both the short term and long terms financial aims (Uwonda et. al, 2013, p. 69). It brings together efforts concerned with payment for goods or services consumed, collection of cash from clients who have consumed products or services on credit and general liquidity management (Aminu, 2012, p. 58).

According to Muller (2008), SMEs must understand credit management if they intend to manage their cash flows. The author noted that credit management helps SMEs to project their cash flow requirements. This helps them optimise their revenues and expenditure timing and amounts. Further, Yaqub & Husain (2010) noted that in order for small businesses to grow, they must address factors that lead to their failure such as cash flow problems. This can be done through better credit management practices.

There are numerous objectives of credit management. According to Aminu (2012) credit management seeks to accelerate cash inflows, delay cash outflows, invest excess cash to earn a return, borrow cash at the best rates available, and maintain an optimal cash level. With better credit and cash flow management practices, a business is capable of holding the right amount of cash and give the business an opportunity to make and receive payments in time. The objective of credit management is to ensure that a business identifies its needs in good time in order to avoid cash flow crisis (Horner, 2013).

### **1.1.2 Credit Management and Performance**

Trade credit, on the supply side, is an investment in terms of accounts receivable. There are a number of benefits that accrue to a business that uses trade credit. First, it reduces the operational costs. As Ferri (1981) noted, it also increases operating flexibility. By relaxing the credit terms, businesses can reduce storage costs for some merchandise with uncertain demands as well as reduce costs related to changes in production levels when demand fluctuates (García-Teruel and Martínez-Solano, 2010).

Secondly, trade credit leads to increased sales. As Meltzer (1960) noted, businesses use trade credit to boost sales. Businesses use trade credit and not direct price reduction in order to increase sales particularly during the period of cash crunch. While most SMEs do not have high profit margins, they regard trade credit as a way to increase sales and profitability (García-Teruel and Martínez-Solano, 2014).

Another reason for businesses to prefer use of trade credit, according to Hill et al. (2012), is interest income. Clients that pay early are provided discounts which is considered an implicit interest rate for late payment. Usually, the implicit rate of return on trade credit is about 40%. This shows that trade credit is usually a lucrative investment for businesses especially in instances where the customer default risk is low (Hill et al. 2012).

Finally, as Wilner (2000) noted, trade credit also helps SMEs to establish a long commercial relationship with their clients. Trade credit normally increase customers' dependence on their suppliers and this leads to a higher implicit interest rate (Hermes et al. 2011). Further, trade credit can be regarded as a switching barrier as buyers may lose access to this financial service if they switch from one supplier to another. This is because suppliers usually offer credit to those businesses that have an established relationship with (Hermes et al. 2011). This forces suppliers to be tied with clients in a stable commercial relationship bound together by trade credit.

Trade credit is not always a rosy affair as it also has some detrimental effects for suppliers. As Emery (1984) noted, there is a trade-off between the benefits and costs on trade credit and, thus, proposed optimal trade credit policy as a way of addressing this

trade-off. Empirical studies have examined the relationship between trade credit (or credit management) and firm performance. For instance, Hill and Lockhart (2012) and García-Teruel and Martínez-Solano (2014) found that trade credit had a positive relationship with firm performance while Kestens et al (2012) concluded that for firms that during the 2008 financial crisis, those companies that extended more trade credit to their clients than before performed better during the crisis as their profitability significantly rose.

Further, Amuzu (2010) sought to establish a link between business success or failure credit management practices of SMEs. According to Peng & Jiahai (2006), cash flow problems are inherent in SMEs due to the fact that they operate with inadequate cash reserves which is exacerbated by poor credit management practices. Uwonda et. al, (2013) noted that one of the issues that affect SMEs in Uganda is poor credit policy which points towards poor credit management practices in SMEs in Uganda.

### **1.1.3 Transport and logistics Industry in Kenya**

Historically, the development of trade and transport and logistics in Kenya began from the port of Mombasa through the Uganda railway. This is a common feature of growth of trade and transport and logistics in sub-Saharan Africa and remains, to this date, even after road transport took over from the rail transport. Currently, most of the cities and economic activities are located or close to the Northern corridor. Therefore, transport and logistics in Kenya is all about operators moving goods along the Northern corridor. By 2005, World Bank estimated that about 10 million tons of goods were moved along the corridor by various transport means including trucks, rail and pipeline (World Bank, 2005).

In spite of the simplicity in the transport and logistics routing in Kenya, there are contrasts to the story. On one hand, the nation is tending to overwhelming difficulties on the public sector side to get up to speed with infrastructural investment and reforms that it has been dismissing for two decades, and actualize modernization ventures at the Customs, or privatize the railroads. Then again, a somewhat productive private sector came up and could create inventive solutions notwithstanding a poor investment atmosphere (Gichuru, 2012).

The most well-known and reported case is the development of an exceptionally proficient air-transport which gives a five-star connection amongst Kenya and the other markets. Kenya has turned into a pioneer in the field since private businesses, local and foreign investors alike, have possessed the capacity to build up an exceptionally effective supply network, maximizing the use of JKIA. The cycle from the farms to Europe can take as little as 24 hours. This achievement was made conceivable by private investors and worldwide liberalization of air-transport (Netherlands-African Business Council, 2014).

According to PwC (2015), the performance of Kenya's transport and logistics sector has been deteriorating over the years. Once ranked 76<sup>th</sup> globally in 2007, Kenya is now ranked 122<sup>nd</sup> out of 155 countries. While global shipments, infrastructure and transport and logistics competences have increased since 2007, there has been a decline in customs, track & trace and timeliness since then. However, the time to import goods and documents is comparable to the other sub-Saharan countries but the costs are still higher in Kenya.

## **1.2 Research Problem**

The failure rate of SMEs globally is estimated by experts to be between 70 and 80 percent. It is substantially higher for countries in sub-Saharan Africa. According to Uwonda et al. (2013), millions of money is lost on SMEs through avoidable mistakes such as those of poor credit management. Aminu (2012) noted that most SMEs are run by people who do not have an idea of how to run a business and, therefore, lack the appreciation of businesses fundamentals. While the problems that affect SMEs are numerous, Abor & Quartey (2010) revealed that credit management is one that denies the SMEs cash flows to run the businesses smoothly. When businesses extend credit, the assumption is always that the buyers will pay promptly (Muller, 2008). This, however, is not always the case.

Most Kenyan transport and logistics companies have been unable to maintain that balance due to the competitive nature of the industry and hence some of the companies have been forced to close shop or downsize (Netherlands-African Business Council, 2014). Thus, their survival rate has tended to worsen (Gichuru, 2012) and credit management may be one of the courses of such low survival rates of these firms.

Loveline, Uchenna, & Karubi (2014) assessed the challenges facing women-owned enterprises and noted that credit management issue was a significant challenge. From the study, the results showed that small businesses were severely hurt by the inability of some of their trade creditors to pay up their debts on time thus affected their working capital. In Kenya, studies on credit management have only focused on the management of credit facilities provided by financial institutions and working capital management

practices of firms in general. None has so far examined this issue in terms of how it affects the survival of SMEs or the performance. This is a gap that the present study sought to bridge by analyzing how the credit management practices of transport and logistics SMEs within Nairobi County affects their performance.

### **1.3 Research Objectives**

The objectives of this study were:

- i. To determine the credit management practices of small and medium enterprises in the transport and logistics sector in Nairobi county, Kenya.
- ii. To establish the effect of credit management practices on the performance of SMEs in the transport and logistics sector in Nairobi county, Kenya.

### **1.4 Value of the Study**

The expected outcome is to be able to show how innovative credit management practices can significantly improve the business performance of transport and logistics companies. This will be beneficial especially to those entrepreneurs in the transport and logistics industry in Kenya as they will understand how better practices of credit management are instrumental to the survival of their businesses.

The study will also be important to policy makers in the transport and logistics sector in terms of coming up with policies that will enhance the development of the sector by addressing some of the skills deficiencies in the sector, especially the credit management skills. Together with the education sector, policies may be geared towards strengthening this skill set within individuals to enhance the business survival rates of SMEs.

The study is also valuable to researchers in the field of entrepreneurship as it seeks to document how credit management challenge affects survival of businesses and how better practices can be linked to better performance of the SMEs in terms of their performance. Future studies can be based on this study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the literature review. The chapter begins with a theoretical review of literature where theories of entrepreneurship are reviewed. Then, a review of empirical literature on the credit risk management practices and performance is made. Finally, a chapter summary is provided with research gaps.

#### **2.2 Theoretical Literature**

This section reviews two broad theoretical foundations. The first is the review of Schumpeter's theory. Secondly, this section reviews the theories related to innovation and implementation cycles. Under this, the works of Shleifer (1986), Schmookler (1966) and Francois & Lloyd-Ellis (2003) are reviewed alongside the limitations of Schumpeter's theory of business cycles.

##### **2.2.1 Theory of Business Cycles and Creative Destruction**

This theory was proposed by Schumpeter, first in 1927 and later in 1939. At the time, he was a standout amongst the most compelling early authors about business cycles, entrepreneurship and innovation (Parker, 2012). In the expressions of one of the considerable financial experts of the twentieth century, Schumpeter contended that business cycles are the repetitive changes in the rate at which advancements are brought into the economy, in the force with which business visionaries practice their sui generis capacity of beating deterrents to new combinations' (Kuznets, 1940). As per Schumpeter, history contains a couple of surprising scenes in which gatherings of incredibly capable business people present progressive advancements which change existing innovations.

Amid these scenes, economies become emphatically and encounter blasts. Be that as it may, the dispersion of these advancements in the long run urge imitators to swarm into the market and contend away the spearheading business visionaries' benefits. Schumpeter contended that such imitators set up the new request as another harmony for the economy. The economy backs off and stagnates, until another arrangement of spearheading business visionaries disturbs the harmony again with another arrangement of progressive developments which renders the past ones old. This accelerates the following blast, and the cycle rehashes itself. Schumpeter recommended that this procedure of entrepreneurial development is in charge of the standard and generally watched changes in monetary movement which he called the "typical" business cycle.

The substitution of old advancements absolutely benefits the business visionaries presenting the new ones, to the detriment of officeholders whose creation is attached to more seasoned advances which now get to be out of date. Schumpeter called this procedure 'creative destruction'. There are various cases of imaginative pulverization, including the substitution of steam trains by diesel and electric trains; of the transmit by the phone; and of vinyl LP's by smaller plates. Financial analysts have as of late examined troublesome Schumpeterian advancements and inventive demolition in more formal settings (Aghion and Howitt, 1998).

Despite the fact that the creative destruction idea has stood the trial of time, various consequent scholars have censured Schumpeter's record of business cycles. Kuznets (1940) was an early pundit, who brought up that Schumpeter significantly neglects to

clarify how unequal entrepreneurial capacities convert into "bouncing" of developments through time which offers ascend to blasts and retreats (1940, 262–263). One plausibility is the entry of major mechanical leaps forward that impact all segments – a general purpose technology (GPT). Yet, there is no logical motivation behind why GPTs ought to touch base in customary cycles; and there is no confirmation that they do by and by either. That makes challenges for Schumpeter's endeavors to connection consistent business cycles to the entry of sporadic GPTs. As Kuznets called attention to, it is workable for GPTs to be connected with 'long wave' cycles, however it is difficult to maintain this contention for fleeting high-recurrence cycles which are of essential enthusiasm to scientists and approach producers. Another issue with Schumpeter's hypothesis is that, radical GPT propels separated, developments have a tendency to rise consistently after some time. Ensuing scholars have perceived this constraint and have grown more sensible models (Parker, 2012).

### **2.2.2 Innovation and Implementation Cycles**

As noted before, Schumpeter's (1939) hypothesis of business cycles experiences two noteworthy downsides. To start with, it produces cycles practically by presumption: leap forward developments are accepted to happen sporadically and to be packed together in time. In addition, these cycles are completely supply driven and exogenous; neither request, nor request desires, assume a part. Second, Schumpeter's hypothesis identifies with longwave cycles, instead of to the short-wave business cycles which have a tendency to be of more noteworthy financial, commonsense, and arrangement intrigue. Shleifer (1986) proposed a basic model which addresses both of these worries. In his model, firms deliver utilization merchandise which buyers request in equivalent extents.

Despite the fact that a firm produces a development, it might defer its commercialization (i.e., advancement) until a later date. It is expected that developments can be postponed without the hazard that another firm will execute it first (however just until the following thought touches base to the segment Y periods later). Without development, firms inside a division are Bertrand contenders. Subsequently cost is driven down to negligible cost, which is the wage rate, standardized to solidarity. All organizations make zero benefits (Parker, 2012).

Dissimilar to Schumpeter (1939), Shleifer joins developments to request. Dissimilar to Schmookler (1966), this connection is not a reaction to genuine request conditions, but instead is a reaction to forward-looking interest desires. Shleifer's model can offer ascent to various patterned equilibria. Business visionaries' self-fulfilling desires figure out which specific harmony acquires and along these lines to what extent a subsidence endures. The distinctive equilibria are Pareto positioned; the most beneficial balance, which one may anticipate that business visionaries will pick, require not be the most proficient one. Shleifer went ahead to demonstrate that an educated adjustment arrangement, financed by a dynamic expense on returns in the blast, can in some cases raise welfare; however, in the event that huge blasts are important to repay business visionaries for high altered development costs, such an approach can have the unreasonable impact of debilitating any execution thus halting all mechanical advance (Parker, 2012).

The indeterminacy of the different equilibria proposes a deficiency in Shleifer's model. Another downside of that model is its solid suspicions of intense however costless impersonation, exogenous creation, and the difficulty of capacity. As Francois and Lloyd-Ellis (2003) call attention to, if business people can store their yield, they ought to contract work, deliver and after that store yield when expenses are low (i.e., amid subsidences) – and offer the yield when request is high (i.e., amid blasts). Clearly, this would undermine the presence of execution cycles as Shleifer considered them. The model of Francois and Lloyd-Ellis (2003) sums up Shleifer's in a few vital regards, unwinding the suppositions about extraordinary and costless impersonation and non-stockpiling. In any case, from our point of view, maybe the most imperative component of Francois and Lloyd-Ellis (2003) is that their business people effectively give exertion towards growing new developments (which diminishes one-for-one from creation time).

Rich however the Francois-Lloyd-Ellis model is, it dubiously predicts that more development movement happens in retreats than in blasts. Truth be told, Barlevy (2007) refers to proof demonstrating that research and development (R&D) spending is unequivocally ace recurrent: most R&D assets are spent amid blasts. That may seem astonishing given that the open door cost of assets, for example, R&D exertion are lower amid retreats, when creation work gets a lower result. As Barlevy (2007) clarifies, this advantage of intertemporal smoothing can be overpowered by a balancing expected cost of deferral, prompting professional cyclicity. This normal cost mirrors the danger of allocation of the business person's development by opponents if the business person does the R&D in retreats and defers the arrival of the advancement to the blast.

## **2.3 Empirical Literature**

The empirical review in this section is based on a number of studies globally, regionally, and locally on credit management. Some of the literature also stems from works in cash management as well as those from working capital management. The issue of SMEs giving out credit to their customers is a cross-cutting theme in all the three concepts hence the reason for borrowing literature from these areas. More specifically, there are a few studies that have focused on trade credit as a form of credit management practice and such literature is also reviewed.

### **2.3.1 Credit management Practices of Entrepreneurs**

Uwonda et. al, (2013) in a study on cash flow management in SMEs in Uganda found that on average, most SMEs monitored their cash flows. Further results showed that most SMEs matched their cash flows and that most SMEs also checked their credit policies routinely. These results show that there is a semblance of some organized form of credit management practice among SMEs in Uganda in terms of having in place a credit policy which is constantly reviewed as well as having an estimation of optimal cash flows within the business.

Wu, Firth, & Rui (2014) examined the relationship between trust and trade credit among Chinese firms. The study argued for and found that private businesses that had higher social trust used trade credit from suppliers more. The same businesses also extended more trade credit as opposed to the businesses with lower trust. Higher trust businesses also collected and paid receivables and payables respectively more quickly. This suggests that for SMEs to offer trade credit to their customers, trust is key.

Ndagijimana & Okech (2014) investigated the factors that affect working capital management practice in SMEs in Nairobi. The study specifically assessed how the working capital is affected by both accounts receivables and payables. The results showed that accounts receivable had a significant positive effect on working capital management practices in the SMEs. Further, the study also revealed that trade credit was offered by SMEs and customers took from two weeks to four months to pay up. These long trade credit periods affected the cash flows and therefore the operations of suppliers of trade credit. This study reveals some of the credit management practices within the working capital that are carried out by SMEs in Kenya.

Scheers (2010) examined the challenges facing family-owned SMEs dealing in groceries in South Africa to understand the extent to which the business owners or managers felt that a number of selected problems affected the success of their businesses. One of the significant findings was that management qualification affected business success. The results also showed that inadequate credit management was a problem experienced by about a third of the businesses. This is directly reflective of the lack of credit management skills within the businesses.

A study by Uwonda et. al, (2013) examined the utilization of cash flow by small businesses in Northern Uganda. Data was gathered from a sample of 120 SMEs in the service sector. This study highlighted the limitations that SMEs face in utilization of cash flow especially in areas such as cash flow projection. The study also found out that most

of the managers had diplomas and certificates from colleges. Only 9 percent of the managers had degrees.

Cant & Wiid (2013) sought to determine the extent to which SMEs in South Africa experienced challenges that negatively impacted the success of the businesses. The survey focused on 81 SMEs. The study found that one of the key challenges faced by the entrepreneurs was lack of skills in various fields to which the authors recommended that there was need to enhance the skills and capabilities of SMEs in order for them to succeed. The study also found that in terms of levels of education, only 24 percent of the managers/owners had degrees. This calls into question their credit management skills.

In a study by Loveline et. al, (2014) in Kuching-Sarawak, the authors assessed the challenges experienced by women entrepreneurs in Malaysia. From a survey of 31 respondents, the study one of the challenges was the inability to employ skillful workers. This, coupled with the challenge of credit management as some of the clients do not pay in time and therefore hurt their cash flows, shows that skills are a hindrance to the success of small businesses.

### **2.3.2 Effect of Credit Management Practices on the Performance**

Padachi (2006) sought to study the working capital management trends and how working capital impacts on firm performance. The focus was on small manufacturing firms in Mauritius. A sample of 58 firms was used and a panel data collected from 1998 to 2003. The regression results revealed that investing highly in receivables leads to dampened profitability. This study, therefore, shows that trade credit may have a negative effect on

the performance of SMEs and firms should be careful not to over-invest in trade credit as this may hurt their cash flows and hence their operations in general. This may lead to their failure eventually.

Garcia-Teruel & Martinez-Solano (2007) studied the effect of working capital management on the profitability of Spanish SMEs. The study collected panel data from 8,872 SMEs from 1996 to 2002. The results demonstrated that it is possible for managers to create value for their businesses by lowering the number of day's accounts receivable. Equally, the study revealed that firms' profitability can be improved if the cash conversion cycle can be shortened.

Garcia-Teruel & Martinez-Solano (2010) tested whether the trade credit decisions follow a model of partial adjustment. Using a sample of 2,922 SMEs in Spain and employing a dynamic panel data model as well as the Gaussian Mixture Model (GMM) method of estimation, the study revealed that firms have a target trade credit level and all decisions taken are meant to achieve that targeted level. The study also found that a positive sales growth, firm size, economic growth, and internal funds generation capacity, are important determinants of trade credit granted by firms.

Kestens, Van Cauwenberge, & Bauwhede (2012) investigated how trade credit was impacted by the 2008 financial crisis. The study also tested whether trade credit changes mitigated the impact of the crisis on firm profitability. The study documented that the impact of the crisis on trade credit was higher when the availability of trade credit

decreased. Finally, the study revealed that the crisis had a negative impact on firm performance. This effect was lower for firms giving more trade credit and higher for firms receiving more trade credit. This shows that during crises, SMEs that offer more trade credit benefit more through improved financial performance than those that receive more trade credit.

Banos-Caballero, Garcia-Teruel, & Martinez-Solano (2012) analyzed the relation between working capital management and profitability for SMEs in Spain. This study examined whether there was a non-linear relationship between profitability and working capital management practices of small businesses. The study found a concave relationship between the two variables. This means that there is an optimal working capital level for SMEs at which point their profitability is maximized. This suggests that SMEs also have an optimal level of debt sales that they should keep in order to enjoy the benefits.

Ferrando & Mulier (2012) sought to examine whether firms trade credit can be used by firms to manage growth. Using a sample of 600,000 small businesses in Europe for the period 1993-2009, the study showed that firms manage their growth by using trade credit. The study noted that for countries where trade credit is more pronounced, the marginal impact on growth is lower but the overall impact is larger. Further, the study revealed that firms that are prone to financial market limitations may bank on the trade credit path in order to manage their growth.

Gul, et al., (2013) investigated the impact of working capital management on performance of small businesses in Pakistan. The study covered a period of seven years from 2006 to 2012. The panel data analysis revealed that average collection period had an inverse relation with performance. This suggests that trade credit has an adverse effect on the financial performance of SMEs.

Martinez-Sola, Garcia-Teruel, & Martinez-Solano (2014) studied the implications of trade credit to profitability for a sample of 11,337 manufacturing SMEs in Spain during the 2000–2007 period. The results showed that an increase in receivables can lead to improved firm performance. Thus, SMEs can improve their overall profitability by giving more trade credit, according to the findings of this study.

Afrifa (2015) examined the relationship between trade credit and firm performance. Panel data regression analysis was used in the estimation of functions relating the effects of trade credit channel and net trade credit on performance. The results of a panel of 1,708 firms over the period 2003-2012 show a positive relation between net trade credit and firm performance; and a positive relationship between performance and trade credit. The results were further strengthened by interacting size and cash flow with trade credit. Overall, the findings provide evidence that the performance of net trade credit and trade credit channel are higher for larger and/or less financially constraint firms.

Ohman & Yazdanfar (2016) examined the impact of trade credit as a funding source on profitability among small and medium-sized enterprises (SMEs). A large cross-sectional panel data set covering 15,897 Swedish SMEs in five industry sectors from 2009 to 2012 was analysed using several statistical techniques. The study provides empirical evidence that the use of trade credit significantly and negatively affects firm profitability, indicating that SMEs with lower accounts payable are more profitable. Furthermore, liquidity level and firm size are positively related to profitability, while firm age is negatively related to profitability.

#### **2.4 Chapter Summary and Gaps**

The empirical review clearly shows some of the credit management practices related to trade credit (or more specifically the accounts receivables) in SMEs across the world. The review has also shown some of skill challenges that SMEs face. The chapter has also reviewed specific empirical link between credit management practices (accounts payables) and SME performance.

From the review, this matter has not received the attention it deserves from entrepreneurship scholars and little is known on how making of credit sales, and management of the same thereof, affects the business survival of SMEs in Kenya. This is a gap in literature that the present study seeks to bridge. This will be done by examining how various credit management practices influence the performance of SMEs. In effect, this will show how credit management affects performance.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methodology adopted for this study. First, the research design is discussed followed by the population of the study. The sample is then discussed followed by data collection tools and techniques. Finally, data analysis procedure is presented.

#### **3.2 Research Design**

This study used a descriptive design. According to Given (2007, p. 42), a descriptive design is important as a way of providing answers five pertinent questions in a research problem – who, what, when, where, and how. This research design usually used to get information on the status of the occurrence and to describe "what exists" with respect to conditions in a situation (Given, 2007). Since this study sought to examine the relationship between credit management practices and performance, this design was best suited to explore the relationship.

#### **3.3 Population**

The population of the study was drawn from transport and logistics companies within Nairobi. According to *Businesslist*, an online directory for businesses in Kenya, Nairobi has 1,133 transport and logistics companies. Most of these businesses fall within the SME sector save for a few global firms. The directory does not categorize the firms in terms of ownership (whether foreign or local) or size. Further, there is no other comprehensive directory available listing transport and logistics companies in Kenya that

is known to the author at the moment. Therefore, the assumption made in this study was that this number suffices as the population of the study.

### **3.4 Sample**

This study used a random sampling technique to select the sample for the study. Random sampling provides every transport and logistics business in Nairobi with the same chance of being selected. Using a sample size calculator at [surveysystem.com](http://surveysystem.com), the appropriate sample size for this study was 287 businesses (confidence level = 95%; CI =  $\pm 5$ ; population = 1,133). Thus, a list of 287 businesses was randomly selected from the population based on the list available at the *Businesslist* directory.

### **3.5 Data Collection**

The study intended to collect primary data from the businesses. Thus, a questionnaire was designed based on the objectives of the study and emanating from the literature review. The target respondents were managers/owners of the transport and logistics companies sampled. The questionnaire was piloted in order to check for validity on 10 companies that did not form the final sample. The results of the pilot were used to amend the questionnaire before final administration. Reliability of the measures was tested using Cronbach's alpha (split-half method) and a value of 0.7 or above was used as a threshold to retain reliable measures for analysis. Enumerators were trained and deployed to collect the data from the respondents. This means that face to face interviews were conducted with the respondents as the enumerators filled in the questionnaires. A period of two weeks was used to collect the data.

### **3.6 Data Analysis**

Data was entered into SPSS and cleaned before analysis. Descriptive analysis was used to summarize some of the initial results especially the demographics. This technique was also used to analyze objective 1. For objective 2, Ordinary Least Squares (OLS) regression analysis was used. The results are interpreted at 95% level of significance. The dependent variable was the performance while the independent variable was credit management practices. Performance was measured using a number of subjective measures within the questionnaire. Further, credit management practices was measured as the mean values of specific practices adopted by the transport and logistics businesses as responded to in the questionnaire.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND FINDINGS**

#### **4.1 Introduction**

This chapter presents the results of the study. The presentation begins with the results of demographic analysis. This includes the title of the respondents, their gender, number of years the firms have operated, respondents' highest levels of education, professional training, markets served by the organisations, and ownership (whether foreign or not and whether family-owned or not).

The chapter then presents the results on the first objective: credit management practices. This includes results on whether the respondents are directly responsible for credit management or whether someone else is, whether they have specific certifications in credit management, the frequency with which the firms extend credit sales to clients, and a myriad other credit management practices as were picked from prior literature.

Finally, this chapter presents the results on the relationship between credit management practices and firm performance. This section begins with the presentation of results on firm performance followed by the results of a correlation analysis between all the variables in the study. Then, the regression results are presented using the four performance models: sales volume, sales growth, overall financial results, and return on investments.

## 4.2 Demographic Analysis

Table 4.1 shows the results on whether the respondents were the business owners, Chief Executive Officers (CEOs) or both. The results show that one third of the respondents were owners of the businesses surveyed, half of them were CEOs while 17% were both owners and managers.

**Table 4.1: Title of respondents**

	<b>Frequency</b>	<b>Percent</b>
Owner	64	33.3
CEO	96	50.0
Owner/CEO	32	16.7
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.2 shows the distribution of respondents by gender. The results show that 75% were male while only 25% were female. This shows that most of the owners and CEOs of the transport and logistics companies in Nairobi are male.

**Table 4.2: Gender of respondents**

	<b>Frequency</b>	<b>Percent</b>
Male	144	75.0
Female	48	25.0
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.3 shows the results on the length of time the companies had been operating in Kenya. As shown, 17% had been operational for a year or less, 33% for one to three years, 33% for four to seven years, and 17% for more than 10 years. The results suggest that half of the businesses had survived beyond three years – an impeccable achievement for most SMEs in Kenya.

**Table 4.3: Length of time the company has been operational**

	<b>Frequency</b>	<b>Percent</b>
< 1 year	32	16.7
1 - 3 years	64	33.3
4 - 7 years	64	33.3
> 10 years	32	16.7
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.4 shows the distribution of respondents by their highest levels of education. The results show that 8% had secondary education, 17% had college education and 75% had university degrees. This shows that a majority of the respondents had at least a degree and were, therefore, highly educated to manage the businesses and especially the credit management issues.

**Table 4.4: Respondents' highest levels of education**

	<b>Frequency</b>	<b>Percent</b>
Secondary schooling	16	8.3
College schooling	32	16.7
University degree	144	75.0
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.5 shows the results on whether the respondents had any professional training. The results show that 83% of the respondents had professional training while 17% did not have any professional training. These trainings were in areas such as accounting, human resources, and supply chain management.

**Table 4.5: Whether the respondents have any professional training**

	<b>Frequency</b>	<b>Percent</b>
Yes	160	83.3
No	32	16.7
<b>Total</b>	<b>192</b>	<b>100.0</b>

The respondents were asked to state the markets they served. Table 4.6 shows that 17% served the Kenyan market only, 33% served the East African market, another 33% served

African market while 17% served the global market. Thus, half of the transport and logistics companies can be considered as being global firms as they serve markets beyond Kenya and East African Community (EAC).

**Table 4.6: Markets served by the business**

	<b>Frequency</b>	<b>Percent</b>
Only in Kenya	32	16.7
Within EAC	64	33.3
Within Africa	64	33.3
Globally	32	16.7
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.7 shows the ownership of the companies in terms of foreign or local ownership. As shown, 42% were foreign owned while 58% were locally owned.

**Table 4.7: Local or foreign ownership**

	<b>Frequency</b>	<b>Percent</b>
Foreign owned	80	41.7
Locally owned	112	58.3
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.8 shows that 75% of the transport and logistics firms were family owned while 25% were not family owned. This suggests that most of the firms were still family controlled and, therefore, may lack professionalism required to run businesses especially where credit control is important to the survival of the business.

**Table 4.8: Family or non-family business**

	<b>Frequency</b>	<b>Percent</b>
Family owned	144	75.0
Non-family owned	48	25.0
<b>Total</b>	<b>192</b>	<b>100.0</b>

### 4.3 Credit Management Practices

This section presents the results on credit management practices. Table 4.9 shows the results on whether the respondents were directly responsible for credit management in their organisations. The study found that 67% were while 33% were not. Thus, a majority of the respondents were directly responsible for credit management in their organisations.

**Table 4.9: Are you directly responsible for credit management in the organisation?**

	<b>Frequency</b>	<b>Percent</b>
Yes	128	66.7
No	64	33.3
<b>Total</b>	<b>192</b>	<b>100.0</b>

For those who said they were not directly responsible for credit management in their organisations, 62% had someone else within the institution responsible for the same while 38% did not have anyone else responsible. This shows that in some firms, no one was directly responsible for credit management.

**Table 4.10: Do you have any other person responsible for credit management?**

	<b>Frequency</b>	<b>Percent</b>
Yes	40	62.5
No	24	37.5
<b>Total</b>	<b>64</b>	<b>100</b>

The respondents were also asked whether they possessed any certification in credit management. Table 4.11 shows that only 25% of the respondents did possess the certification while 75% did not. Those that possessed the certification were mostly from foreign firms where such certifications are available from their parent countries.

**Table 4.11: Do you possess certification in credit management?**

	<b>Frequency</b>	<b>Percent</b>
Yes	48	25.0
No	144	75.0
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.12 shows the frequency with which the transport and logistics firms surveyed extended credit sales to clients. As shown, 25% of the firms always did so, 42% did so very often, 25% did so sometimes while 8% never did so. This suggests that most of the firms in the survey extended credit sales to their clients.

**Table 4.12: How often does your business extend credit sales to clients?**

	<b>Frequency</b>	<b>Percent</b>
Rarely	16	8.3
Sometimes	48	25.0
Very often	80	41.7
Always	48	25.0
<b>Total</b>	<b>192</b>	<b>100.0</b>

Table 4.13 shows the credit management practices adopted by the transport and logistics firms in Nairobi. The most common practice was checking customer credit worthiness before granting trade credit (mean = 4.50). This was followed by offering discounts for early payment (mean = 3.42). Some firms also used customer's audited accounts to extend trade credit (mean = 3.33).

**Table 4.13: Credit management practices adopted by transport and logistics companies**

	<b>Mean</b>	<b>SD</b>
Check customer credit worthiness before granting trade credit	4.5000	.50131
Offer discounts for early payment	3.4167	1.32370
Use customer's audited accounts to extend trade credit	3.3333	1.31577
Categorize customer accounts according to late payment risk	2.5833	1.50160
Check customer credit worthiness from credit reference bureaus	2.2500	1.36524
Conduct formal analysis into reasons for late payment	2.2500	1.01300
Customize customer accounts according to solvency risk	2.1667	1.21652
Use factoring services	2.1667	1.34722
Have credit insurance for sales	2.0833	1.44474

#### **4.4 Credit Management Practices and Performance**

This section presents the results on the relationship between credit management practices and the performance of SMEs in the transport and logistics sector in Nairobi. Table 4.14 shows the summary performance of the organisations. The performance, as shown, was moderate to low as revealed by the mean scores for all the four performance indicators.

**Table 4.14: Performance of transport and logistics companies**

<b>Performance</b>	<b>Mean</b>	<b>SD</b>
Return on investment	3.3333	1.43747
Sales volume	3.1667	1.21652
Overall financial results	2.9167	1.25883
Sales growth	2.5833	1.60931

Table 4.15 shows the correlation matrix for the interrelationship between the dependent and independent variables used in the study. Of particular interest is the relationship among the independent variables. The results show that the correlations are generally below 0.8 hence can be regarded as low. This means that there are no serial correlations between the independent variables hence the variables can be placed in one model and regressed through OLS method to examine how they affect the performance of surveyed organisations.

Table 4.16 presents the regression results. Model 1 tests the relationship between credit management practices and sales volume. The results show a negative and significant relationship between checking the credit worthiness of a client before extending trade credit and the sales volume ( $\beta = - 2.419$ ;  $p < .01$ ). This means that as sales volumes fall when firms check the credit worthiness of clients. This may be explained by the fact that when these checks are done, less sales through credit are made as most clients are not credit worthy hence the sales volumes fall. This was also true for customization of clients according to solvency risk ( $\beta = - 0.999$ ;  $p < .01$ ), categorization of clients according to late payment risk ( $\beta = - 0.930$ ;  $p < .01$ ), discounts for early payments ( $\beta = - 1.796$ ;  $p < .01$ ), and use of factoring services ( $\beta = - 0.556$ ;  $p < .01$ ). All these practices had a detrimental effect on the sales volumes. On the other hand, positive and significant effects were observed between sales volume and use of Credit Reference Bureau (CRB) to check credit worthiness ( $\beta = 2.779$ ;  $p < .01$ ), use of audited accounts ( $\beta = 1.252$ ;  $p < .01$ ), and conducting formal analysis on reasons for late payment ( $\beta = 0.930$ ;  $p < .01$ ). These practices, therefore, improved the sales volume as they led to more credit sales. The effect of credit sales insurance on sales volume was negative but insignificant suggesting that it had no impact on sales volumes. Model 1 explained 70.8% of the variance in sales volume ( $r^2 = 0.708$ ) and it was fit to explain the relationship between credit management practices and performance of transport and logistics firms in Nairobi ( $F = 48.926$ ;  $p < .01$ ).

**Table 4.15: Correlation matrix**

	1	2	3	4	5	6	7	8	9	10	11	12
1. Sales volume	1											
2. Sales growth	.891**	1										
3. Overall financial results	.392**	.479**	1									
4. Return on investment	.255**	.169*	.525**	1								
5. Check customer credit worthiness before granting trade credit	-.137	-.052	-.199**	-.116	1							
6. Check customer credit worthiness from credit reference bureaus	.177*	.238**	.207**	.598**	.061	1						
7. Use customer's audited accounts to extend trade credit	.279**	.303**	-.034	.074	-.127	.700**	1					
8. Customize customer accounts according to solvency risk	-.189**	-.264**	-.538**	-.032	.137	.429**	.384**	1				
9. Categorize customer accounts according to late payment risk	.038	.066	.114	.453**	.056	.787**	.749**	.313**	1			
10. Conduct formal analysis into reasons for late payment	.510**	.527**	.542**	.345**	.082	.015	-.189**	-.102	-.096	1		
11. Offer discounts for early payment	.373**	.436**	.423**	.455**	-.442**	.545**	.305**	-.043	.088	.234**	1	
12. Have credit insurance for sales	-.246**	-.093	-.180*	.027	-.289**	.414**	.558**	.135	.518**	-.701**	.113	1
13. Use factoring services	.239**	.264**	.305**	.490**	-.248**	.797**	.772**	.290**	.738**	-.153*	.384**	.638**

\*\* . Correlation is significant at the 0.01 level (2-tailed); \* . Correlation is significant at the 0.05 level (2-tailed).

**Table 4.16: Regression models**

<b>Practice</b>	<b>Model 1 Sales Volume</b>	<b>Model 2 Sales Growth</b>	<b>Model 3 Financial Results</b>	<b>Model 4 ROI</b>
Check customer credit worthiness	-2.419*** (.368)	-3.155*** (.301)	.380* (.224)	.894*** (.277)
Check credit worthiness from CRB	2.779*** (.405)	4.654*** (.331)	-.486** (.246)	-1.083*** (.305)
Use customer's audited accounts	1.252*** (.109)	1.885*** (.089)	-.457*** (.066)	-1.408*** (.082)
Customize according to solvency risk	-.999*** (.104)	-1.610*** (.085)	-.513*** (.063)	.209*** (.079)
Categorize according to late payment risk	-1.873*** (.222)	-3.197*** (.090)	.352*** (.135)	1.412*** (.167)
Conduct formal analysis for late payment	.930*** (.111)	2.175*** (.090)	.308*** (.067)	-.217*** (.083)
Offer discounts for early payment	-1.796*** (.259)	-2.893*** (.212)	.418*** (.157)	1.188*** (.195)
Have credit insurance for sales	-.077 (.085)	.891*** (.069)	-.310*** (.052)	-.447*** (.064)
Use factoring services	-.556*** (.160)	-1.372*** (.131)	.991*** (.097)	1.159*** (.120)
<b>R</b>	.841	.943	.948	.939
<b>R<sup>2</sup></b>	.708	.889	.899	.881
<b>F</b>	48.926***	161.223***	180.293***	149.848***

\*\*\*. Correlation is significant at the 0.01 level (2-tailed); \*\*. Correlation is significant at the 0.05 level (2-tailed); \*. Correlation is significant at the 0.1 level (2-tailed). Standard errors are in parentheses.

In model 2 in Table 4.16, the relationship between credit management practices and sales growth was tested. The results show that there was a positive and significant relationship between sales growth and checking credit worthiness through CRB ( $\beta = 4.654; p < .01$ ), use of audited accounts to extend credit ( $\beta = 1.885; p < .01$ ), conducting formal analysis for reasons for late payments ( $\beta = 2.175; p < .01$ ), and having credit insurance for sales ( $\beta = 0.891; p < .01$ ). This means that the use of these practices led to an improvement in sales growth. On the other hand, there was a negative and significant relationship between sales growth and checking of customer credit worthiness ( $\beta = - 3.155; p < .01$ ), customizing clients according to solvency risks ( $\beta = - 1.610; p < .01$ ), categorizing according to late payment risk ( $\beta = - 3.197; p < .01$ ), offering discounts for early payment ( $\beta = - 2.893; p < .01$ ), and use of factoring services ( $\beta = - 1.372; p < .01$ ). These practices were, therefore, detrimental on the growth of sales of transport and logistics firms in Nairobi. This model explained 88.9% of the variance in sales growth ( $r^2 = 0.889$ ) and was fit to explain the relationship between credit management practices and sales growth ( $F = 161.223; p < .01$ ).

Table 4.16 also shows the results of model 3 depicting the relationship between credit management practices and overall financial results of the transport and logistics companies in Nairobi. The results show that checking of credit worthiness of customers, categorizing customers according to late payment risk, conducting formal analysis for reasons for late payment offering discounts for early payment, and use of factoring had positive effects on the overall financial results of the transport and logistics companies surveyed. This shows that the adoption of these practices led to improved financial results. However, checking credit worthiness through CRB, use of customer audited

reports, customizing clients according to solvency risks, and credit insurance for sales had negative effects on the overall financial results. This suggests that these practices were detrimental to the bottom line of these companies. The model explained 89.9% of the variance in financial results ( $r^2 = 0.899$ ) and it was fit to explain the relationship between credit management practices and financial results ( $F = 180.293$ ;  $p < .01$ ).

Model 4 tested the relationship between credit management practices and return on investment (ROI) of the surveyed transport and logistics firms in Nairobi. The study found that there was a positive and significant relationship between ROI and checking of customer credit worthiness, customizing clients according to solvency risk, categorizing clients according to late payment risk, offering discounts for early payment, and use of factoring services. These indicate that there were some benefits on ROI for using these particular practices. Further, the results show a negative relationship between ROI and checking credit worthiness through CRB, use of audited accounts, conducting formal analysis for reasons for late payment, and having credit insurance for sales. These practices were seen to hurt ROI of transport and logistics companies in Nairobi. The model used in the study explained 88.1% of the variance in ROI ( $r^2 = 0.881$ ) and was fit to explain the relationship between credit management practices and ROI ( $F = 149.848$ ;  $p < .01$ )

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION, AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of research findings, the conclusions made from the findings, recommendations for policy and practice, and suggestions for further research.

#### **5.2 Summary**

This study sought to examine the credit management practices adopted by transport and logistics companies in Nairobi as well as assess the relationship between those practices and performance of the organisations. Primary data was gathered from firms in Nairobi County. In terms of credit management practices, the results showed that 67% of the respondents were directly responsible for credit management in their organisations while 62% of those who were not directly responsible for credit management in their organisations had someone else within the institution responsible for the same. The study also found that only 25% of the respondents did possess credit management certification.

The study revealed that the most common credit management practice was checking customer credit worthiness before granting trade credit (mean = 4.50), followed by offering discounts for early payment (mean = 3.42) and use of customer's audited accounts to extend trade credit (mean = 3.33). As to the relationship between credit management practices on performance, the results were mixed. No single practice had a uniform and stable effect on all the four parameters of performance used in the study. For instance, checking credit worthiness of customer before extending credit had a negative effect on sales volume and sales growth while it had a positive effect on financial results

and ROI. The use of CRB to check for credit worthiness before extending credit had positive effects on sales growth and volume but negative effects on financial results and ROI.

### **5.3 Conclusion**

The study concludes that transport and logistics companies in Nairobi employ very limited credit management practices. However, this can be justified by the fact that most of these companies do not have the requisite expertise in terms of qualified credit managers to help them manage credit sales better. Thus, the practices used as ad hoc at best.

The study also concludes that while the relationship between credit management practices and performance is mixed in this study, there is a pattern emerging where when credit management practices lead to an improvement in sales (volume and growth), it negatively impacts the overall performance of the firm (financial results and ROI). This is true for all the credit management practices used in this study except for customization according to solvency risk, conducting formal analysis for reasons for late payment, and credit insurance for sales.

### **5.4 Recommendations**

First, the study recommends that the transport and logistics companies in the SME sector should embrace better credit management practices by employing qualified personnel to be in charge of credit management. These personnel will ensure that better practices are adopted in order to improve on both sales and the companies' overall profitability.

Secondly, the study recommends that transport and logistics companies in the SME sector should decide, at a strategic level, what is important between better sales or better overall performance of the firms. At the moment, credit management practices that improve on sales lead to poor overall performance and vice versa. It should be noteworthy to work on a way to enhance both measures of performance in order for the credit management as a practice to have a positive impact on the firms.

Lastly, it is important that other firms borrow from the results of this study for practical purposes. Further, for policy purposes, it is important that employees be trained and certified in credit management in order to improve this important discipline in institutions.

### **5.5 Suggestions for Further Research**

More research is needed in this area especially to identify how credit management practices influence the performance of other firms not in the transport and logistics business as well as those outside Nairobi. This will help provide a basis for application of these results to other institutions.

Secondly, further research should be carried out to identify other factors may help explain the relationship between credit management practices and firm performance. These intervening factors may explain why the results in the present study are mixed.

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## APPENDICES

### Appendix I: Research Questionnaire

#### Section I: General information

1. Name of the business

.....  
...

2. What title best describes you in relation to this organisation?

Owner [ ]

CEO [ ]

Owner/CEO [ ]

Other [ ]

3. What is your gender?

Male [ ]

Female [ ]

4. How long has the business been operational?

Under 1 year [ ]

1 year – 3 years [ ]

4 years – 7 years [ ]

8 years – 10 years [ ]

Above 10 years [ ]

5. What is your level education?

No formal schooling [ ]

Primary schooling [ ]

Secondary schooling [ ]

College schooling [ ]

University degree [ ]

6. If college schooling or university degree, what is your specialization?

.....

7. Do you have any professional training?

Yes [ ]

No [ ]

8. If Yes in 7 above, what is your professional training?

.....

9. How many employees does the organisation have?

.....

10. In which markets does this business operate?

Only in Kenya [ ]

Within EAC [ ]

Within Africa [ ]

Globally [ ]

11. What is the majority ownership of this business in terms of local or foreign ownership?

Foreign owned [ ]

Locally owned [ ]

12. This company is ...

Family owned [ ]

Non-family owned [ ]

## **Section II: Credit management practices**

13. Are you directly responsible for credit management in this organization?

Yes [ ]

No [ ]

14. If no in 13 above, do you have any person in the organization

Yes [ ]

No [ ]

15. Do you possess certification in credit management?

Yes [ ]

No [ ]

16. How often does your business extend credit sales to its clients?

Always [ ]

Very often [ ]

Sometimes [ ]

Rarely [ ]

Never [ ]

17. What is your credit period in days?

.....

18. To what extent do you agree with the following statements regarding credit management practices in your organization? Key: 1 = strongly disagree; 2 = disagree; 3 = undecided; 4 = agree; 5 = strongly agree

<b>Practice</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Check customer credit worthiness before granting trade credit					
Check customer credit worthiness from credit reference bureaus					
Use customer's audited accounts to extend trade credit					
Customize customer accounts according to solvency risk					
Categorize customer accounts according to late payment risk					
Conduct formal analysis into reasons for late payment					
Offer discounts for early payment					
Have credit insurance for sales					
Use factoring services					

### **Part III: Performance**

19. How do you rate the performance of your organization over the last three year as compared to others in the industry in terms of the following parameters? Key: 1 = very poor; 2 = below average; 3 = average; 4 = above average; 5 = excellent)

<b>Practice</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Sales volume					
Sales growth					
Overall financial results					
Return on investment					

## **Appendix II:List of Transport and logistics Companies in Nairobi**

1. Hellman's Perishables Transport and logistics
2. Destiny Cargo Forwarders
3. Crystal Spark Company
4. Around Africa Tours and Travel
5. Nellions Moving & Relocations Ltd
6. Guangnai Trading Company Ltd
7. Cargo Elegance Transport and logistics

(Source: BusinessList, 2016. [http://www.businesslist.co.ke/category/transport\\_and\\_logistics/city:nairobi](http://www.businesslist.co.ke/category/transport_and_logistics/city:nairobi))