THE MANAGEMENT OF CREDIT SALES RISKS IN ETHIOPIAN PETROLEUM SUPPLY ENTERPRISE

BY

KEBEDE GEBREMEDHIN

A THESIS SUBMITTED TO St. MARY'S UNIVERSITY COLLEGE, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

FEBRUARY, 2013

ADDIS ABABA, ETHIOPIA

St. MARY'S UNIVERSITY COLLEGE
SCHOOL OF GRADUATE STUDIES
FACULTY OF BUSINESS

THE MANAGEMENT OF CREDIT SALES RISKS IN ETHIOPIAN PETROLEUM SUPPLY ENTERPRISE

BY
KEBEDE GEBRE-MEDHIN

APPROVED BY BOARD OF EXAMINERS

____________________	____________________
Dean, Graduate Studies	**Signature**
____________________	____________________
Advisor	**Signature**
____________________	____________________
External Examiner	**Signature**
____________________	____________________
Internal Examiner	**Signature**

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

I would like to take this opportunity to show my gratitude to my able guide Dr. Tesfaye Debela for supervising me on my research and navigating me to follow the direction along the way. He made valuable suggestions at every stage of the study and without his guidance, support and encouragement it would not have been possible to complete the work.

Abreham Zenebe contributed a lot of his valuable time and effort on this paper. He has had the patience of supporting me at the deep end of working my study especially in matters related to the information technology (IT).

I would also like to thank Mohamed Ahmed and Manaye Balcha for their constructive suggestions during the course of my study.

I also acquired many research ideas from Tsegay G.Michael, whose useful comments helped me deal with the research title and access for data.

Selamawit Kassa and Shimeles Getachew for their unreserved cooperation in providing data necessary for the study.

Esayas Feseha's friendly contribution while typing my thesis is also much appreciated.

My wife, Berhan Eyasu and my twin sons Alenigzi Kebede and Amanigzi Kebede have been constant source of inspiration and support, without their cooperation and encouragement it would not have been possible to complete this work.

I am indebted to all the respondents for their positive response and valuable cooperation during distributing questionnaire and conducting interview and group discussion. I am thankful to them all.

Acronyms/Abbreviations

EPE	Ethiopian Petroleum Enterprise
EPSE	Ethiopian Petroleum Supply Enterprise
NOC	National Oil Ethiopia
YBP	Yetebaberut Beherawi Petroleum
JICA	Japan International Cooperation Agency
AR	Accounts receivable
ACP	average collection period
DSO	Days sales outstanding
B2B	business-to-business
CPA	Certified Public Accountant (s)
AS/NZS	The Australian/New Zealand Standard
CEO	chief executive officer

List of Tables

ABSTRACT

Making analysis about customers’ creditworthiness is the foundation of credit sales risk management. The possibility of customer’s failure in paying their dues is one of the main factors evaluating credit sales risk management. The purpose of this paper is to suggest possible solutions that may address this problem in the area of credit sales risk management by assessing the existing practice. A descriptive type of research method was used in conducting this study. The result of this study evidences that the Ethiopian Petroleum Supply Enterprise has no means to secure the collection of its credit sales. There is a big gap between the desired and the current credit sales risk management. The case thus reinforces the idea that the enterprise is in need of credit sales risk management. The results of the study show that setting clear risk management strategy, policies and risk appetite is a requirement so as to manage credit sales/receivables risk effectively.

CHAPTER ONE

INTRODUCTION

1.1 Background

Risk management

Bovee, Thill and Mescon (2005, p. 498) state that all businesses face the risk of loss. Fire, lawsuits, accidents, natural disasters, theft, illness, disability, and death are common occurrences that devastate any business-large or small-if they are not prepared for. Risk is a daily fact of life for business and individuals. Dunne (2008, p. 3) defines risk as “the chance of something happening that will have an impact on the achievement of organisational stated objectives.” Risk is the variation based, on chance, in possible outcomes of an event. Thus, managing risk is indeed an important part of running a business. “The process of reducing the threat of loss from uncontrollable events and funding potential losses is called risk management” (Bovee, Thill and Mescon 2005, p. 500). The Economist Intelligence Unit report (2007, p. 2) suggest that as companies deepen their investment in emerging markets, extend their supply chains and face increasing pressure from regulators, investors and other stakeholders to increase transparency and disclosure, the executives tasked with risk management assume an ever-greater responsibility for the smooth running of the business. Voinea and Anton (2009) discuss that risk management is nowadays considered as a key activity for all companies. Once largely associated with insurance, compliance and loss avoidance, the risk management function has been transformed in recent years and is now firmly entrenched as a board-level concern.

Risk appetite

Larry and Martens (2012, p.1) explain that risk appetite is the amount of risk, on a broad level, an organization is willing to accept in pursuit of value. Each organization pursues various objectives to add value and should broadly understand the risk it is willing to undertake in doing so. Stulz (2008) points out that defining that appetite is one of the most important responsibilities of management and the board. It is at the heart of the firm's strategy and how it creates value for its shareholders.

Financial Risk management

Culp, (2002) states that financial risk is the possibility that certain events can unexpectedly and adversely affect a firm's financial performance, whether by reducing its net asset value or cash flows, or by lowering its reported earnings. The financial stability report (2007) discusses that enterprises and households are increasingly exposed to financial risks. Hardy (2007, para. 1) point out that financial risk management has become an extremely important discipline for corporations, financial institutions and many government enterprises. Gheorghe and Gabriel (2010, p. 139) state that financial risk management has gained an importance for the companies and financial institutions**.** Eberlein, Frey, Kalkbrener and Overbeck (2007, p. 1) argue that the role of financial risk management is to measure and manage risks and the main application area of financial risk is credit risk.

Relationship between Credit and Sales

Szabo (2007, p. 1) illustrates that nowhere in business is this more apparent than in the relationship between credit and sales. The cornerstones that form the basis of a successful credit/sales relationship and the closest of personal relationships are the same: trust, understanding, shared objectives, and shared responsibility. Schwarz (2011, p. 2) explains that offering customers installment purchase is a widely used instrument to increase sales. Without sales, credit would have no reason to exist. Credit and sales become partners creating opportunities for both the organization and its customers to generate profits. There are internal and external factors influencing credit sales risk as the credit sales risk is influenced by the country‘s political situation, economic stability, etc.

Salek (2005, p. 20-22) states that the objective of credit controls is to manage the risk inherent in the extension of credit to promote sales. This risk is known as credit risk. A company that sells only on cash-in-advance or cash-on-delivery terms and requires a secure form of payment has no credit risk. However, unless that company has a product or service that no one else offers, its sales will be much lower employing those terms of sale. The global marketplace runs on credit. Tyburski (2010, p. 166) discusses that trade credit is an important market tool. The receivables created as a result of trade credit provide protection to sales from competitions. It acts no less than a magnet in attracting potential customers to buy the product at terms and conditions favorable to them as well as to the firm. Goods and services are routinely delivered with the expectation that payment will be made according to the agreed payment terms Schwarz (2011, p. 3).

Credit sales management

Credit risk means that obligor for some reasons will not be able to meet his liabilities and creditor will not get the money back (Klein, 1995; Vaskelaitis, 2003) as cited in Pridotkiene *(*2006, p. 8).

Tyburski (2010, p. 166) states that management of trade credit is commonly known as management of receivables. Jones (2010, p. 1) points out that the sales of goods and services are exposed to a significant number of risks, many of which are not within the control of the supplier. The highest of these risks and one that can have a catastrophic impact on the viability of a supplier, is the failure of a buyer to pay for the goods or services it has purchased. In today’s challenged domestic and global economic climate, recognizing and managing future risks has become a priority for businesses.

Schwarz (2011, p. 2) discusses that sales on credit as one part of a selling concept, directly incorporate a conflict between marketing and financial objectives between gaining customers and controlling the credit risk involved by extended, more customer-oriented payment conditions. Jones (2010, p. 1) points out that losses attributed to non-payment of a trade debt or bankruptcy can and do occur regularly. Default rates vary by industry and country from year-to-year, and no industry or company is immune from trade credit risk.

Thomas (2007, p. 1) argues that in a business world, accounts receivable would require nothing more than collection not management or process. However, with growing complexity, payment ambiguity, payer plans, co-pays, co-insurance and other factors that drive up costs, the management of the accounts receivable process continues to demand more attention. Josefb (1997, P. 1) suggest that the simple fact for all to understand in any selling organisation, be they CEO or sales manager, is that credit means trust. For trust to have any real value or meaning it requires knowledge, which encompasses all the seller needs to have to make the informed decision.

According to Josefb (1997) the seller can ask himself three fundamental questions in respect of the granting of credit:

1. Is the customer about to fail? (the solvency risk): Solvency risk occurs when a company becomes insolvent (unable) to pay all its debts when they fall due for payment.
2. Can the customer pay our account on time? (the liquidity risk): Liquidity risk is structured according to best practice of existing business that leads on to detailed analysis of the balance sheet of a credit customer.
3. Is the customer growing or declining? (the volume risk): The quantity of solid, liquid, gas, or plasma substance that a firm is going to sell on credit.

The Ethiopian Petroleum Supply Enterprise (EPSE) is the importer of petroleum products in Ethiopia and sales its imported products to the domestic petroleum products distributing companies on a 100% credit basis. As a result, there is always a threat with regard to the collectability of the entire sales made on credit basis which calls for a strong and timely management of financial risks with emphasis on credit sales.

The purpose of the study may be summerized as follows;

1. Board members and the management of the enterprise would like its credit sales to be safe from material risks in collecting credit sales. The need to create awareness and implement the management of credit sales/receivables risk does not give time. This may enable the management of EPSE to management credit sales/receivables that can give rise to financial risks.
2. Any firm that deal with selling products on credit can continue in business for the very reason of its existence if it is able to collect its credit sales by designing and implementing a strong credit sales and collection policies.

Ethiopian Petroleum Supply Enterprise

The establishment of the current Ethiopian Petroleum Supply Enterprise (EPSE) is rooted in the beginning of the Asseb Petroleum Refinery plant in January 1965. The refinery was located on the Red Sea Coast, in Asseb Town of the then Eritrea Province. The refinery started operation in July 1967 and had been managed under the management of the then Ethiopian Petroleum Corporation (Refinery Profile, Jan. 1977).

Following With the downfall of the Dergue regime in May 1991 and the separation of Eritrea from Ethiopia, the Ethiopian Petroleum Corporation has been reorganized by the Council of Minister's Regulation No. 210/1995, and started to be called Ethiopian Petroleum Enterprise (EPE) as a state owned public enterprise operating on the basis of commercial principle.

In 2012 EPE was reorganized again by the Council of Minister's Regulation No.265/2012 by the name Ethiopian Petroleum Supply Enterprise (EPSE) with the following objectives:

1. On the basis of assessment of the country's demand, to supply petroleum to distribution companies by importing clean products and importing and processing crude oil;
2. To forecast, maintain and administer the required national petroleum reserve and, based on instructions of the government, supply petroleum products from the reserve;
3. To build its own petroleum depots within the country and, as may be necessary in neighboring countries, and to invest in companies operating petroleum depot facilities;
4. To engage in any other related activities necessary for the attainment of its objectives.

The authorized capital of the enterprise is Birr 2,000,000,000 (Two billion Birr) of which Birr 500,000,000 (Five hundred million Birr) is paid up in cash and in kind.

The Ethiopian Petroleum Supply Enterprise is the importer and supplier of petroleum products in Ethiopia. It supplies its imported products to the domestic petroleum distributing companies such as (TOTAL, Oil Libya, National Oil Ethiopia (NOC), Yetebaberut Beherawi Petroleum (YBP), Kobil, TAF, Dallol, Nile, and WAS) in Ethiopia on a thirty day credit period. There is no cash sales (i.e the whole sales is made on credit basis).

The structure of the enterprise is organized with board management at the top, one chief executive officer (CEO), three sectors, six departments, four services and thirteen divisions. EPSE has also thirteen national petroleum reserve depots in Ethiopia and two branch offices found in Djibouti and Sudan. It has a total number of 505 employees.

Background of the Study

There is a consensus regarding the advantages of credit sales and its risks. The Ethiopian Petroleum Supply Enterprise, the sole importer of petroleum products in Ethiopia, sales those products to the domestic petroleum distributing companies engaged in this business on a thirty day open credit basis. There are about nine companies dealing in the distribution of petroleum products business in the country. Every company is granted a thirty days credit period by the seller (EPSE). There is a contractual agreement that justifies the buyer-seller relationship between the seller and buyer companies. Here the enterprise does not consider customers' creditworthiness analysis which is a pivotal question in the credit policy of a firm in accepting or rejecting an account for credit granting and its control. As a result, a huge uncollected amount of money is created every year. This is the area where a prompt solution is required through a research work. Hence, the intention of this paper is to fill this gap in the area of credit sales management to reduce its risk.

1.2 Statement of the Problem

In situations where a company is engaged in importing strategic commodities like petroleum products such as (gasoline, benzene, kerosene, Jet fuel, light fuel oil, and heavy fuel oil) by paying huge amount of money in foreign currency and undertake its sales fully on credit basis, the management of credit sales risks becomes mandatory. The consequence of any failure in the management of credit sales can seriously affect not only the earnings of the enterprise but also the economy of the nation as a whole. According to the study made by Japan International Cooperation Agency (JICA) conducted on May, 2010, Ninety (90) percent of the Ethiopian transport sector uses petroleum products. The Ethiopian Petroleum Supply Enterprise (EPSE) a state owned enterprise deals with such a sensitive operation of petroleum products importation and sales the whole of its imported products on a thirty days credit period. EPSE is earning 100% of its revenue from the sales of petroleum products to each firm entered to and dealing with this business. The enterprise grants a thirty day credit period to every buyer with a 100% credit sales uniformly without making customers' creditworthiness analysis and setting credit limit. These expose the enterprise to financial losses created due to the credit sales attributed to non-payment of the trade debt or bankruptcy. Of the total amount sold within a seven year time Birr**13,099,125,572**

(14% x Birr **91,636,839,917**) was found to be uncollected timely. These are the issues demanding for credit sales risk management. Hence, the study will investigate the level and extent of the issue and suggest possible solutions that may address the problem.

1.3 Research Questions

The following were the research questions that this study discussed about.

1. What is the level of credit sales risk in the enterprise?
2. What mechanisms does the enterprise use to identify, measure, and manage this risk?
3. What are the practices of credit sales and collection management and the lessons that EPSE can learn?

1.4 Objectives of the Study

The primary objective of this study was to assess the management of credit sales risks in the Ethiopian Petroleum Supply Enterprise.

In line with this main objective, the specific objectives are as follows:

1. To assess the practices of credit sales /Receivables management.
2. To relate the theoretical credit sales and collection policies as written in financial management books to the actual practice of EPSE.
3. To ascertain the risk appetite of the enterprise.

1.5 Significance of the Study

Linking risk management to any business operation has become a function that comes of age. The significance of the study is in supporting the board of directors and the management to understand the magnitude of credit sales risk through identifying the strengths and weaknesses of the existing practice on credit sales management to design and implement sound credit sales and collection policies and advice them on how to apply appropriate creditworthiness analysis techniques and manage credit sales risk effectively by suggesting possible solutions that may address the issue of credit sales risk management and improve the credit policy of the enterprise. The study has also provided basic information for further studies to be conducted in this area in the future.

1.6 Scope of the Study

The study has limited its scope to the management of credit sales risks in the Ethiopian Petroleum Supply Enterprise. Seven consecutive years (2005-2011) credit sales and collection data were considered to show the trend of creditworthiness analysis, credit sales and collection variables.

1.7 Structure of the Study

This research paper is organized in the following manner. Chapter one dealt with the introduction that has included background of the study and the enterprise under consideration, statement of the problem, research questions, objectives, significance, and scope of the study. Chapter two explored the review of related literatures on the subject matter credit sales risk management. Chapter three presented the methodology of the Study. Chapter four focused on results and discussion. Finally, chapter five wound up the study with conclusion, limitations and recommendations of the research paper.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1 Risk Management

Embrechts, Frey, McNeil (2006) state that risk is any event or action that may adversely affect an organization's ability to achieve its objectives and execute its strategies.

Crouhy, Galai, and Mark (2006) argue that the future is uncertain, and no one ever been successful in forecasting the financial risks, interest rates, or exchange rates consistently or credit, operational, and systemic events with major financial implications. Conrow (2003) points out that several other considerations exist that warrant the increased emphasis on risk management in addition to those related to uncertainty in trading. "Risk management is an immense subject, ranging from medicine to engineering, to finance, to political science." "It is a pervasive phenomenon" Poitras (2002, p.129). Department of finance (2004) describes that risk can be thought of as a possible loss or other adverse consequence that has the potential to interfere with an organization's ability to achieve its objectives and fulfill its mission. Risks to the achievement of objectives can be due to both internal and external events.

"Risk management and risk taking are not opposites, but two sides of the same coin" Crouhy, Galai, and Mark (2006, p. 1). Effective risk management offers organizations a means of improving strategic, operational and financial management. Thus, risk management is a process of clearly defined steps which support better decision making by contributing a greater insight into risks and their impacts. "The focus should be on successfully managing risk rather than on the system of risk management" Department of finance (2004, p. 6)**.**

Institute of Management Accountants (2007) states that in the economic landscape of the 21st century, an organization's business model is challenged constantly by competitors and events that could give rise to substantial risks. Department of finance (2004) suggests that by including risk management in strategic planning process firms can make decisions on their business activities with greater degree of safety. An organization must strive to find creative ways to continuously reinvent its business model in order to sustain growth and create value for stakeholders. Britton (2000) discusses that risk management is the culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects. Failure to identify, assess, and manage the major risks facing the organization's business model, however, may unexpectedly result in significant loss of stakeholder value. Thus, senior leadership must implement processes to manage effectively any substantial risks confronting the organization Department of finance (2004).

Kutsch (2010, p. 6) argue that "perfect knowledge about the future state of an environment is not possible and error will always occur despite attempts of correction through clarification and exactitude." Lafarge (2007, p. 5) points out that "risk taking is an inherent trait of any enterprise." There can be no growth or creation of value in a company without risk taking. However, if risks are not properly managed and controlled, they can affect the company's ability to attain its objectives. Hart (2006) suggests that risk management is the culture, processes and structures that are directed towards realizing potential opportunities whilst managing adverse effects. Risk management encompasses a set of resources, behaviours, procedures and actions that is adapted to the characteristics of each company and that enables managers to keep risks at an acceptable level for the company.

Stuz (2008) states that the first step in risk management is to identify and measure risks. Risk measurement takes place in the context of risk metrics that aggregate various types of risks to help top management understand the risk position of the firm. Kutsch (2010, p. 4) points out that" risk identification allows managers to single out risks that may affect the firm's objectives." The choice of risk metrics is the cornerstone of risk management because it determines what top management learns from risk managers about the overall risk position of the firm. Once the risks are identified and measured, they must be communicated to the firm's leadership.

For Stuz there are five types of risk management failures:

1. Failure to use appropriate risk metrics:

Risk Metrics is useful only as long as the question it answers is well understood.

2. Mismeasurement of known risks:

The case where management has chosen the right metrics, but the risks have been measured incorrectly, for a variety of reasons.

3. Failure to take known risks into account:

A different kind of measurement failure is a failure to take account of risks. “ignored” risks in which material risks are known (to at least some people inside the firm), but not reflected in the firm’s risk models can take two different forms that have different implications for a company.

4. Failure in communicating risks to top management:

The role of risk management in strategic decision-making is to provide timely information to the board and top management that allows them to assess the consequences of retaining or laying off risks. But for managements and boards to understand such risks and their consequences for the firm’s operations, risk managers must communicate effectively.

5. Failure in monitoring and managing risks:

Risk management is responsible for making sure that the firm takes the risks that it wants to take and not others. As a result, risk managers must constantly monitor the risks the firm is taking.

The economist Intelligence Unit (2007) explains that risks such as credit risk, market risk and foreign-exchange risk, remain fundamental considerations. Risk managers consider their organisations to be handling the areas of credit, market and financial risk well, and reputational risk fairly well. Kew, Richmond, and Surrey (2009, p. 5) state that “at the most summarised level there are seven questions that risk management should address.”

1**.** Leadership: do the board and senior management support and promote risk management?

2. Are people equipped and supported to manage risk well?

3. Is there a clear risk strategy and risk policies?

4. Are there effective arrangements for managing risks with partners?

5. Do the organisation’s processes incorporate effective risk management?

6. Are risks handled well?

7. Does risk management contribute to achieving outcomes?

Arrow (2008, p. 1-2) suggest that “times have changed though and over recent years there has been a growing number of professionals who have recognized the benefits of formally documenting, objectively analyzing and transparently managing risk.” Hart (2004, p. 7) believes that “to be most effective, risk management should become part of an organization's culture.” It should be embedded into the organization's philosophy, practices and business processes rather than be viewed or practiced as a separate activity. When this is achieved, everyone in the organization becomes involved in the management of risk. Culp (2002, p. 15) states that "although there have been countless incremental improvements in many aspects of the process, the most fundamental change in the process of corporate risk management has been the growing recognition that risk management must contribute to the overarching corporate goal of value maximization." But this begs the question: how does risk management increase value?

2.2 Benefits of Managing Risks

Unless there is a benefit out of it, one should not waste his/her time in studying and implementing risk management. Managing risks provides the following benefits Britton (2000) and Arrow (2008).

- More rigorous basis for strategic planning

  Giving a too rigorous concentration on the view that the strategic planning is comprehensive and accurate, and can form a sound basis for its achievement.
- Better identification of opportunities

  Doing everything possible to identify, prioritize, and target the opportunities in the firm's landscape and assure its sustainability.
- Fewer costly surprises

  Be able to customize options and face much lesser inexperienced costs.
- Better outcomes - encourages creativity/innovation

  Encouraging creativity and innovation so as to achieve better outcomes.
- Compliance with relevant legislation

  Conforming to a rule, such as a specification, policy, and other relevan**t** laws and regulations of the country are aware of and take steps to comply with.
- Increased knowledge/understanding of risk exposure

  Increase the understanding of risk exposure by revealing the true nature of risk exposure of the firm's operation.
- Better cost control

  Provides the support, advice, and expertise that are critical for decision making.
- More systematic decision-making methodology

  Describing a framework for identifying the different types of decision models and its principles provide a chance to choose more systematic decision-making methodology amongst the best.

- Greater transparency in decision-making

  Encourages more informed decision making, and supports greater participation.
- Proactive rather than reactive

  Thinking ahead and planning how to head off or deal with problems and help in defining risk appetite.

2.3 Risk Appetite

Wyman (2007) states that the first step in linking risk to strategy is to define what is meant by risk appetite within the organization in question. Although risk appetite can be defined in general terms as the variability in results that an organization and its senior executives are prepared to accept in support of a stated strategy, the end product needs to articulate clearly key sources of risk in a form that is readily comprehensible to non specialists. Stulz (2008) believes that when determining the risk appetite of an organization, the general approach is to weigh the benefits of increased risk-taking against the costs, and to aim for the point where the marginal benefits equal the marginal costs. As such, defining risk appetite also requires a fundamental review of the perspectives and concerns of all key stakeholders, as well as the implications of current corporate strategy.

Ernst & Young (2010, p. 2) find that defining risk appetite is very much a task for the board and top management, as it is intimately linked to defining the overall strategy of a company. After all, risks are the source of profit. The board should therefore ask itself: “What are our three most profitable risks?” (i.e. entering into new geographic markets, the risks of expansion into new, and the risk of a new product introduction). Farrell (2009, p.5) points out that “the effectiveness of developing risk appetite rests on how it relates to established organizational components (e.g. strategy and business plans) and how well it is understood throughout the organization.” Ernst & Young (2010, p. 2) “Designing risk management without defining your risk appetite is like designing a bridge without knowing which river it needs to span. Your bridge will be too long or too short, too high or too low, and certainly not the best solution to cross the river in question.” Risk appetite is the amount and type of risk an organization is willing to accept in pursuit of its business objectives.

For Ernst & Young the specific categories of risk include strategic, operational, financial and compliance risks.

Farell (2009) argue that a well defined risk appetite should have the following characteristics:

- Reflective of strategy, including organizational objectives, business plans, and stakeholder expectations;
- Reflective of all key aspects of the business;
- Acknowledges a willingness and capacity to take on risk;
- Is documented as a formal risk appetite statement;
- Considers the skills, resources, and technology required to manage and monitor risk exposure in the context of risk appetite;
- Is inclusive of a tolerance for loss or negative events that can be reasonably quantified;
- Is periodically reviewed and reconsidered with reference to evolving industry and market conditions;
- Has been approved by the board.

Barnes (2009, P. 2) discusses that "the risk appetite themes depend on an enterprise's stakeholders, its investors/owners, regulators, customers, distributors, management, employees, and business community." Investor concerns could be stated in terms of earnings or stock price, while regulator concerns could be stated in terms of minimum capital requirements.

2.4 Financial Risk Management

Culp (2002,) argues that discussing optimal corporate financing and capital structure without taking account of risk management opportunities is quite likely to lead to serious inefficiencies in how a firm manages risk or raises funds if not both. Embrechts, Frey, McNeil **(**2006, p. 6) define that financial risk is "the quantifiable likelihood of loss or less than expected returns." A comprehensive approach to corporate finance must begin with a risk management process and strategy that aims explicitly at maximizing the value of the firm. Voinea and Anton (2009) point out that the ability to manage risks is a source of competitive advantage and a way to increase the shareholder value for non-financial and financial corporations. The best known and most widely managed forms of financial risk are market, credit, and liquidity risk. For most companies, the main contribution of risk management is likely to be its role in minimizing the probability of costly financial distress. Cunningham (2004, p. 10) discusses that "financial factors are presented as a motive for both trade credit supply and demand." To explain why sellers supply trade credit, many theories assume that suppliers have a comparative advantage over financial institutions in supplying credit to customers in the market. One source of this advantage may be information asymmetries concerning the borrower's creditworthiness. Since suppliers observe the buyer at regular intervals, they may detect changes in the customer's financial health sooner than banks or other institutions. Furthermore, the supplier may be better able to enforce the credit contract with the threat of cutting off supplies. Another source of the supplier's comparative advantage may be their superior ability to salvage value from repossessed goods. The financing advantage that suppliers may have allows them to provide liquidity to their customers.

Embrechts, Frey, Neil (2006) describe that the main categories of financial risk include:

Market risk: The risk of a change in the value of a financial position due to changes in the value of the underlying components on which that position depends commodity prices etc.

Credit risk: The risk of not receiving promised repayments on outstanding investments because of the "default" of the borrower.

Operational risk: The risk of losses resulting from inadequate or failed internal processes, people and systems, or external events.

2.5 Relationship between Credit and Sales

"Trade credit is generated through credit sales and managed through accounts receivable" Leitch and Lamminmaki (2009, p. 3). Maysami (2009, p. 10) recognizes that "the objective of credit/receivables management is to promote sales and profit until that is reached where the return on investment in further finding of receivable is less than the cost of funds raised to finance that additional credit (i.e., cost of capital)." Banerjee, Dasgupta and Kim (2007) find that one major purpose of trade credit is to promote sales. The profitability of a business is dependent upon its ability to successfully sell its products for more than it costs to produce them. Selling on credit generally attracts customers and increases sales volume. "How a company manages the process is a fundamental point of credit sales management" Levine and Young (2009, p. 14). There are, however, direct and indirect costs to extending credit which must be weighed against any potential benefits. A successful credit policy is one in which the costs of granting credit are offset by the benefits of higher sales. "When the firm ships the goods or performs the services without receiving cash, an account receivable (AR) is generated" Maysami (2009, p. 10). Kimmel,Weygandt and Kieso (2009) explain that the term receivables refers to amounts due from individuals and companies. Receivables are claims that are expected to be collected in cash. The management of receivables is a very important activity for any company that sells goods or services on credit. Receivables are important because they represent one of a company's most liquid assets. For many companies, receivables are also one of the largest assets.

For Kimmel Weygandt and Kieso receivables are classified as (1) accounts receivable, (2) notes receivable, and (3) other receivables.

Accounts receivable (AR) are amounts customers owe on account. They result from the sale of goods and services. Companies generally expect to collect accounts receivable within 30 to 60 days. They are usually the most significant type of claim held by a company.

AR = Credit sales per day x Length of collection period

Notes receivable represent claims for which formal instruments of credit are issued as evidence of the debt. The credit instrument normally requires the debtor to pay interest and extends for time periods of 60–90 days or longer. Notes and accounts receivable that result from sales transactions are often called trade receivables.

Other receivables include non-trade receivables such as interest receivable, loans to company officers, advances to employees, and income taxes refundable.

These do not generally result from the operations of the business. Therefore, they are generally classified and reported as separate items in the balance sheet.

The receivable position must be monitored closely by calculating the average collection period (ACP) by using the following formula and comparing it to the industry average.

$$\mathbf{ACP = \frac{Receivables}{Daily\ sales}}$$

Trade credit volumes are usually measured by accounts receivable (AR) and accounts payable (AP). Accounts receivable measures the unpaid claims a firm has against its customers at a given time, and therefore indicates its supply of trade credit. “Accounts payable measures a firm’s usage of its trade credit” Cunningham (2004, p. 3). Banerjee Dasgupta, and Kim (2007) discuss that accounts receivable accrue when firms sell on credit, and accounts payable are incurred when they purchase on credit.

The aging schedule is a popular accounts receivable tool (Pike and Cheng, 2001) and is widely referred to in the normative literature (Arnold, 2005; Peacock ,2003). It comprises a classification of outstanding balances according to the period of time they have been outstanding. These age categories can be calibrated according to months, weeks, or days, depending on an organisation’s requirements, and are frequently expressed as a percentage relative to the total accounts receivable balance (Lewellen and Edmister, 1973; Lewellen and Johnson, 1972; Zeune, 1991) as cited by Leitch and Lamminmaki (2009, p. 4).

Flinspach and Stuckey (12007, p. 17) argue that' poor receivables management is reflected in high DSO (Days sales outstanding) and affects a company's ability to access internal funding sources." In other words, the longer it takes for a payment to be collected, processed, matched and applied, the longer it is until that cash can be used for other purposes or until the credit lines can be freed up and the next sale or shipment made to the customer. Levine and Young (2009, p. 6) point out that "days sales outstanding (DSO, or `debtor days') is an expression of the amount of cash you have tied up in unpaid invoices from customers." Addressing DSO is therefore an achievable way of taking the efficiency agenda to the next level.

DSO = 365 x accounts receivable balance/annual sales.

2.6 Credit Sales Risk Management

Abe (2009, p. 1) discusses that " in commercial or B2B Credit, fear of loss and lack of knowledge on the full profit potential and how to properly manage this unlimited medium of exchange creates bottlenecks and inefficiencies that hinder the fruitful expansion of trade." Iichiro and Yamashiro (2004, p. 6) suggest that "trade credit transactions with client companies are the most important component of trading company finance." An alternative to money is credit and no government printing presses or controls are required. Credit allows for the value of a product or service to be assessed and for profitable sales to happen based on payment at some later date. Credit terms are a medium of exchange just like money. Credit is an intermediary used in trade to avoid the inconvenience and inefficiencies of a pure barter system. Levine and Young (2009) states that most business-to-business companies extend credit to their customers. It is often a crucial tool for attracting customers. Jones (2010, P. 1*)* explains that "no industry or company is immune from trade credit risk." How you manage that process is a fundamental part of cash flow management. People who owe you money, debtors, are a vital part of cash inflow and poorly managed credit can mean delays in converting sales to cash or, more seriously, trading with customers who are unable or unwilling to pay.

Chandra (2008) argues that firms grant credit to facilitate sales. It is valuable to customers as it augments their resources. The credit period extended by business firms usually range from 15 days to 60 days. When goods are sold on credit finished goods get converted in to accounts receivable (trade debtors) in the books of the seller. A firm’s investment in accounts receivable depends on how much its sells on credit and how long it takes to collect receivables.

Chandra (2008), Maysami (2009), Suraj, and Tybursky (2010) suggest that the important variables (dimensions) of a firm’s credit policy are: creditworthiness standard, credit period, cash discount, and collection effort.

Credit worthiness standard: The pivotal question in the credit policy of a firm is what standard should be applied in accepting or rejecting an account for credit granting. At one end of the spectrum, it may decide not to extend credit to any customer. At the other end, it may decide to grant credit to all customers irrespective of their credit rating. These are often the more practical ones.

Credit period: The credit period refers to the length of time customers are allowed to pay for their purchase.

If a firm allows 30 days of credit period with no discount to induce early payments, its credit terms are stated as net 30.

Lengthening of credit period pushes sales up by inducing existing customers to purchase more and attracting additional customers. Shortening of the credit period would have opposite influences.

Cash discount for early payment: Firms generally offer cash discount to induce customers to make prompt payments. The percentage discount and the period during which it is available are reflected in the credit terms.

Collection effort: The collection program of the firm aimed at timely collection of receivables, may consists of the following:

- Monitoring the state of receivables
- Destpatch of letters to customers whose due date is approaching.
- Telegraphic and telephonic advices to customers around the due date.
- Threat of legal action to overdue accounts.
- Legal action against overdue accounts.

Chandra (2008, p.703) discusses that “proper assessment and management of credit risk is important as it helps in establishing credit limits.” In managing credit risk, two types of errors occur.

Type I error: A good customer is misclassified as a poor credit customer.

Type II error: A bad customer is misclassified as a good credit customer. Both the errors are costly.

Bolten and Conn (1981) point out that the objectives of accounts receivable management are:

1. To promote sales and profits and
2. To minimize the total of associated investment, operating, and shortfall costs of extending credit to customers. The finance officer has to balance the additional sales against the additional costs to determine the firm's optimal investment in accounts receivable.

Accounts receivable like other short- term assets have the following investment, operating, and shortfall costs Chandra et al (2008).

Investment costs: The time gap between cash outflow and inflows forces the firm to raise funds (or to use internally generated funds it could invest more profitably elsewhere) to meet its payments.

Operating costs: These costs include: - the costs of hiring credit manager, assistants, and bookkeepers for the finance department.

- the costs of acquiring credit information sources to establish potential customers credit worthiness, and
- the costs of generally maintaining and operating a credit department (stationary, postage, computer time and the like). There are also Delinquency costs, default costs.

Shortfall costs: If the firm fails to extend credit to customer who is creditworthy, and that customer buys from a competitor the firm's sale suffer. The finance officer must balance the additional profits from avoiding shortfalls against the additional costs of extending credit.

The objective of accounts receivable management is to minimize the sum of the investment costs. More credit means more administrative and collection costs.

Trade credit is the short-term financing available to the firm from its suppliers. Trade credit is supplied by nonfinancial businesses Iichiro and Yamashiro (2004, p. 34)

2.7 Types of Trade Credit

Caruba (2007) illustrates that there are three basic types of trade credit.

Open credit: is a form of credit where companies extend short term credit to customers without requiring any down payment and without adding either interest or carrying charges to the bill. It is usually extended for a thirty day period.

Option-terms Credit: permits a customer to charge up to a limit and pay within thirty days of the billing date without penalty. A firm can assign a carrying charge for any amount not paid within that time period and release additional credit (up to a pre-set limit) as payments are made.

Revolving Charge Credit: refers to the continuous releasing of credit to the credit ceiling as payments are made. This type of credit is the most common form of credit given to businesses.

2.8 Guidelines for Extending Trade Credit

Caruba (2007) Levine and Young (2009), and Tyburski (2010) suggest that before any credit is extended to any customer, a policy or list of rules must be established in order to weed out potential bad credit risks. The policy should be written down and kept up to date with current creditworthiness of specific customers, especially ones with large lines of credit or that increase their orders, plus warnings or notes of current poor experience. It should not be arrived at by default. The following steps are suggested by Caruba et al (2007) in establishing an effective credit policy.

STEP 1: Set polices including standards for measuring each applicant.

The policies and standards a firm sets depend on the type of business the firm is running. A wholesaler's policies will likely differ from a manufacturer's policies, especially in terms of credit limits.

STEP 2: Devise a credit application form to be completed by the company applying for credit before granting credit to anyone.

STEP 3: Verify the data on the application form.

The information provided in the application form should then be checked carefully.

STEP 4: Evaluate the application.

Evaluate the application based on what is called the five C's of Credit (character, capacity, capital, collateral, and conditions).

Character: refers to his/her acknowledgement of a moral obligation to pay the debt as promised. Examine the customer's previous payment habits using relevant information obtained from the customer's bank and previous suppliers.

Capacity: is the subjective judgment of customer's ability to repay the loan. An examination of the financial statements may aid in making the correct judgment.

Capital: the analysis of financial ratios, especially risk ratios such as the debt-to-asset and the current ratios.

Collateral: Which the customer may offer as security and to the general economic as well as specific geographical and industry conditions.

Conditions: Finally, when deciding whether to extend credit to a customer or not, the company need to take into consideration the general economic as well as specific geographical and industry conditions which might speak positively or negatively about granting credit to any customer.

STEP 5: Set a credit limit.

It is necessary to set a credit limit depending upon company policies to control losses in case the account goes south.

STEP 6: Establish terms of sale.

The purchase price for early payment (to reduce its average collection period and improve cash flow) as well as state a limit or credit period as to how long the customer has until the bill must be paid.

STEP 7: Set up an effective invoicing system.

Prepare and mail invoices promptly on a regular basis (usually monthly or bi-monthly) with all payment terms clearly stated based on accurate, efficient and organized system.

STEP 8: Monitor credit usage carefully.

Monitoring accounts receivable allows to identify problems before they become serious credit risks by setting up a system for aging all accounts receivables.

STEP 9: Establish a bad debts collection policy.

Timely and effective debt collection is essential to generate positive cash flow and to increase profits by diminishing the need for short-term operating loans.

2.9 Credit Control

“Credit control is a complex process, which costs both time and administrative costs” Tybursky (2010, p. 188). For Tybursky the elements incorporated in the credit control function are: (1) Checking customer's credit worthiness, (2) prompt invoicing and follow up, (3) credit insurance, (4) financial statements, and (5) use of electronic data processing equipment.

1**. Checking Customers Credit Worthiness:** The assessment can be done on the basis of financial soundness, general behavior, past records, business habits and traits of the applicant's ability to pay for the goods or services opted by him.

2. Prompt Invoicing and Follow-up: This is an executive action involving prompt issue of invoice and equally close follow-up action.

3. Credit Insurance: This point pertains to credit exports and is of high importance for credit control of exports.

4. Financial Statements: Audited financial statements are important documents that present desirable sources of information to the seller regarding the financial position of customer for credit control.

5. Use of Electronic Data Processing Equipment: In the modern world, the importance of computers cannot be possibly denied. Electronic data processing equipment holds its own individual importance in providing timely and accurate information pertaining to the status of accounts by providing a vast array of detailed information to the management in making certain credit decisions.

2.10 Control of Receivables

Tyburski (2010, p. 190) recognizes that "control of receivables largely depends upon the system of credit control practiced by a business enterprise." It becomes a part of organization obligation to obtain full and relevant information complete in all respect before deciding upon the right customer for the right amount of credit grant. Salek (2005, p. 5) states that "the quality of the receivables asset is an excellent barometer of credit sales or customer service." A critical part of managing receivables is determining who should be extended credit and who should not. Whenever an order is placed by an applicant financial position and credit worthiness becomes essential. "Only after ensuring the degree of safety an order should be accepted and delivered" Schwarz (2011, p. 10).

2.11 Liquidity Risk

CPA Australia Ltd (2010, p. 2) find that "liquidity risk is the risk that a business will have insufficient funds to meet its financial commitments in a timely manner." All businesses need to manage liquidity risk to ensure that they remain solvent. Nikolaou (2009) discusses that the notion of liquidity in the economic literature relates to the ability of an economic agent to exchange his or her existing wealth for goods and services or for other assets.

Bhalla (2002, p. 399) explains that “liquidity ratio and short-term solvency ratios are used to judge the firm’s ability to meet such current obligations as its account payable and the current position of its long-term debt.” Liquidity can also refer to the unhindered flows among the agents in a business system. Inability of doing so would render a business entity illiquid. This ability can be hindered because of asymmetries in information and the existence of incomplete markets.

2.12 Risk Ratios

CPA Australia Ltd (2010), Maysami (2009), Delannay and Weill (2004) state that financial/risk ratios play an important role in the granting or denial of loan and allow a comparison of your business with your competitors and to industry averages. “The most frequently used risk ratios are the current and the quick (acid test) ratios” Bhalla (2002, p. 399). As a conventional rule, a current ratio of 2-to-1 (current assets twice of current liabilities) or more is considered to be satisfactory Pandey (1981).

Current Ratio = Current assets divided by current liabilities

The current ratio compares the book value of current assets with current liabilities.

Quick, or Acid, Ratio = Current assets less Inventories divided by current liabilities

The acid or Quick Ratio, which indicates the extent to which current liabilities can be paid immediately out of liquid assets (cash or cash equivalent), and may indicate the size of the buffer of cash.

2.13 Risk Management Process

The Australian/New Zealand Standard (AS/NZS 4360: 1999, and 2004), department of finance (2004), Institute of Management Accountants (2007), and Dunne (2008) describe that the systematic application of management policies, procedures and practices to the tasks of communicating, identifying, analysing, evaluating, treating, monitoring and reviewing risk.

The risk management process designed by the Australian/New Zealand Standard-AS/NZS et al (4360:1999 and 2004).

Identify Risks

This step seeks to identify the risks to be managed. Identification should include risks whether or not they are under the control of the organization. A risk not identified at this stage may be excluded from further analysis.

1. What can happen, where and when? The aim is to generate a comprehensive list of sources of risks and events that might have an impact on the achievement of each of the objectives identified in the context.

2. Why and how it can happen? Having identified what might happen, it is necessary to consider possible causes and scenarios.

3. Tools and techniques: Approaches used to identify risks include checklists, judgments based on experience and records, flow charts, brainstorming, systems analysis, scenario analysis and systems engineering techniques.

Analyse Risks

Risk analysis provides an input to decisions on whether risks need to be treated and the most appropriate and cost effective risk treatment strategies by developing an understanding of the risk. It involves consideration of the sources of risk, their negative consequences and the likelihood that those consequences may occur. Risk is analysed by combining consequences and their likelihood.

1. Evaluate existing controls

Identify the existing processes, devices or practices that act to minimize negative risks or enhance positive risks and assess their strengths and weaknesses.

2. Consequences and likelihood

The magnitude of the consequences of an event, should it occur, and the likelihood of the event and its associated consequences, are assessed in the context of the effectiveness of the existing strategies and controls.

Evaluate Risks

The purpose of risk evaluation is to make decisions, based on the outcomes of risk analysis, about which risks need treatment and treatment priorities. Risk evaluation involves comparing the level of risk found during the analysis process with risk criteria established when the context was considered. Risk evaluation is made whether to accept the risk or treat the risk. Criteria used to make decisions regarding accepting or treating the risk should be consistent with the defined internal, external and risk management contexts and taking account of the objectives and goals of the firm.

Treat Risks

Risk treatment involves identifying the range of options for treating risks, assessing these options and the preparation and implementation of treatment plans.

There are three basic methods of treating the risk, these are:

1. Avoid the Risk. This is achieved by either deciding not to proceed with the activity that contains an unacceptable risk, choosing an alternate more acceptable activity, which meets the objectives and goals of the organisation, or choosing an alternative and less risky methodology or process within the activity.

2. Transfer the Risk. Risk transfer transmits the organisation's risk to an outside party. The most common method of risk transfer is the purchase of insurance or indemnity.

3. Control the Risk. This is the most commonly used treatment option as it is focused on reducing the likelihood of the risk occurring or the impact of the risk if it occurs, or both. The most effective methods of risk control are those which redesign the systems and processes so that the potential for an adverse outcome is reduced.

4. Assessing risk treatment options. Selecting the most appropriate option involves balancing the costs of implementing each option against the benefits derived from it. The cost of managing risks needs to be commensurate with the benefits obtained. Risk treatment options should consider the values and perceptions of stakeholders and the most appropriate ways to communicate with them.

Monitor and Review

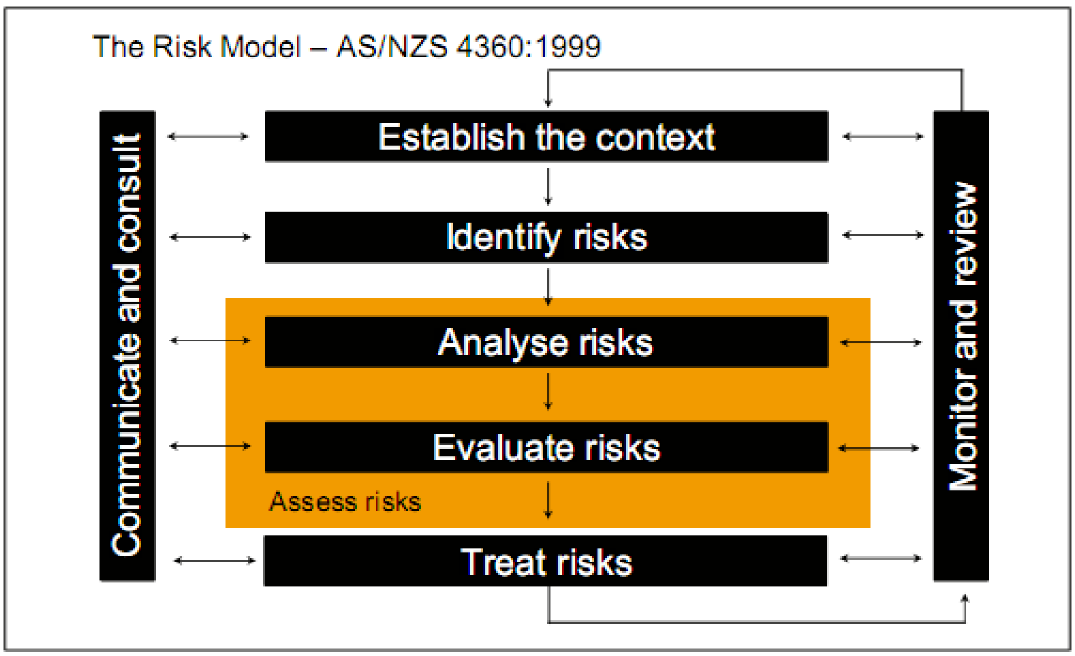
Ongoing review is essential to ensure that the management plan remains relevant. Actual progress against risk treatment plans provide an important performance measure and should be incorporated into the organization's performance management, measurement and reporting system. Monitoring and review also involves learning lessons from the risk management process, by reviewing events, the treatment plans and their outcomes.

Communication and Consultation

Communication and consultation are important considerations at each step of the risk management process. Effective internal and external communication is important to ensure that those responsible for implementing risk management, and those with a vested interest understand the basis on which decisions are made and why particular actions are required.

Schwarz (2011, p. 4) discusses that identifying, analyzing and monitoring customer credit risk is an integrative part of a company's risk management. On the one hand such a system depends on historical accounting data, on the other hand it generates useful information for controlling and managing credit risk.

2.14 The Risk Model



Source: World bank Study Tour, Risk Management overview, New Zealand. May 2000.

Summary

It is important to reiterate that this literature was embarked upon with the main objectives of reviewing and compiling the literatures on the theories and best practices of the management of financial risks with emphasis on credit sales.

Topics such as risk management, risk appetite, financial risk management, relationship between credit and sales, credit sales risk management, types of trade credit, guidelines for extending trade credit, credit control, liquidity risk, risk ratios, risk management process, and the risk model were covered under this chapter. All the topics deal with the policies, procedures, and objectives that should be followed to manage credit sales. These are taken as a bench mark to evaluate the practice of managing financial risks with emphasis on credit sales and forward recommendations that may improve credit sales management of the firm under consideration.

Credit sales have both PROS & CONS. The main advantage of credit sales is that it will attract additional customers and increase sales volume and profit. It can also increase direct and indirect costs, which must be weighed against its potential benefits. In addition to the costs associated with managing credit sales, the most critical problem which needs a special focus is the possibility of non-payment of customers. The whole concern of credit sales risk management falls on this point among other things. Hence, implementing the theories and best practices presented under the review of related literatures can improve the management of financial risks resulted from credit sales.

Relating the theories of credit sales management against the actual practice of the enterprise shows that there is a gap in defining risk appetite, using aging schedule for receivables, calculating of ACP, DSO, and risk ratios, using the important dimensions of credit policy, and the overall credit sales risk management which the study liked to fill.

CHAPTER THREE

METHODOLOGY

Methodology is a system of explicit rules and procedures in which research is based and against which claims of knowledge are evaluated. Therefore, this chapter focused on the research techniques adopted and used for this study with the aim of achieving the research objectives.

3.1 Research Design

In this study, a descriptive type of research method is adopted with the help of quantitative and qualitative study techniques. Descriptive type of research method is chosen because the purpose is to describe the existing practices of the elements that are being studied in order to suggest solutions.

Some open-ended interview questions were included in the research in addition to the structured questionnaire statements so that respondents had the opportunity to make in depth suggestions on the existing condition that may help to make future improvements on the subject matter. The limitation of structured questionnaire statements is that the respondents are not given the opportunity to provide ideas in depth. Therefore, questions with an open- ended nature are included to obtain and take some other suggestions/recommendations that are not included in the questionnaire.

3.2 Population

The target population of the study consists of the employees under the petroleum purchase, sales, finance, audit departments and the management members in the Ethiopian Petroleum Supply Enterprise. The choice of these departments and the management members stem from the fact that these employees and management members know the practices of credit sales, collection and creditworthiness analysis of the enterprise. For effective coverage and reasonableness, the entire population was used to evaluate the enterprise’s credit sales management. The population is classified into three groups based on their status of responsibility (i.e the junior professionals, senior professionals and the management members). In all groups employees with academic qualification of bachelor’s degree and above were conducted during the research work. This enabled the author to collect the required data at a reasonable time and quality because employees with such academic qualification can understand the data collection tools prepared by the researcher. The total number of the population is 63.Out of the total population 60 have bachelor’s degree and above in accounting, management, and only one from the management members in chemistry. This constitutes 95 percent of the target population. It should be pointed out that limited financial resources at the researcher’s disposal could not permit or allow to contact and include the opinions of branch offices workers in Djibouti and Sudan.

3.3 Sample and Sampling Techniques

Since the targeted population of this study is manageable in size and accessible with low cost, there was no need to use sample and sampling techniques for the primary data. Seven consecutive years (2005-2011) credit sales, collection and creditworthiness analysis practice of EPSE are taken from the secondary data to evaluate the trend of the variables to achieve the effort of this study.

3.4 Sources of Data

The study used primary data (interview and questionnaire) and secondary data (annual reports,) sources. Both were important sources of data to complete what was intended by the research work.

3.5 Procedures of Data Collection

Every study has its own framework for collecting data to ensure that the required data are collected accurately and economically. Data collection plan, preparation and distribution of structured questionnaire was administered to the respondents to obtain primary data and seven years credit sales and collection secondary data was collected from the enterprise’s annual reports. The decision to structure the questionnaire was predicated on the need to reduce variability in the meanings possessed by the statements as a way of ensuring comparability of responses and save the time of respondents. 60 questionnaires were distributed to respondents. Out of the total 60 questionnaires distributed to respondents 57 (95%) were returned which the study used for final analysis and 3 (5%) of the questionnaires were not returned.

3.6 Methods of Data Analysis

Data collected from the primary and secondary sources were analysed, summarised, and interpreted accordingly with the aid of the descriptive statistical techniques such as simple percentages and tables. This was used so as to enable the researcher to draw precise and valid conclusion and recommendations. Using the simple percentage for analysis, higher percentages were considered the best in drawing conclusions and validating of research questions/ statements.

3.7 Research Instrument

The instruments that this study used were primary data which included interview, questionnaire and group discussion and the secondary data obtained from annual reports.

The questionnaire consists of two parts as described below.

Part one contains the details on personal information of respondents and **Part two** of the questionnaire deals with measuring the creditworthiness analysis of customers, the management of credit sales, and the collection aspect of the enterprise comprising five statements.

All statements in **Part two** were measured using a five point Likert-scale ranging from “strongly agree” (5) to “strongly disagree” (1). Among the other Likert type scales this five point Likert-scale is used to measure the level of agreement of responses Vagias (2006 p.9).

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter dealt with the presentation of results and discussion of the data gathered through questionnaire, interview, and group discussion as primary data and the use of secondary data to come up with the necessary data for the topic from the total of 57 respondents. The data comprises responses from junior professionals, senior professionals and managers of petroleum purchase, sales, finance, audit departments and deputy CEO of the enterprise under consideration. It provides the practices on creditworthiness analysis, credit sales and collection activities operated from 2005 up to 2011 in the Ethiopian Petroleum Supply Enterprise with the ultimate objective of strengthening the management of its credit sales. The relevant data here was the actual credit sales and collection made during the seven consecutive years of operation. Having the relevant data on hand enables the author to describe the existing condition and trends of the variables.

4.1 RESULTS

Table 1: Academic Qualification of Respondents

Qualification	No of Responses	
	Frequency	Percent
Bachelor’s Degree	52	91%
Master’s Degree	5	9%
Total	57	100%

Source: Research Data, 2012

The table of academic qualification of respondents above shows that 52 (91%) of the respondents have Bachelor's Degree and 5 (9%) of the respondents have Master's Degree.
This information was collected to know the academic qualification of the respondents engaged on creditworthiness analysis, credit sales and collection activities of the enterprise which helps to show how potential the respondents are in discharging assigned responsibilities.

Table 2: Gender Distribution of Respondents

Gender	No of Responses	
	Frequency	Percent
Female	24	42%
Male	33	58%
Total	57	100%

Source: Research Data, 2012

The table of gender distribution of respondents above shows that 33 (58%) of the respondents are male while 24 (42%) of the respondents are female.
This information was sought to know about the gender distribution of respondents working under the petroleum purchase, sales, finance, and audit departments of the organization.

Table 3: Age of Respondents

Age	No of Responses	
	Frequency	Percent
Less than 25 years	0	0%
25-35 years	22	39%
36-45 years	17	30%
Above 45 years	18	31%
Total	57	100%

Source: Research Data, 2012

The table of age of respondents above shows that 22 (39%) of the respondents 25-35 years, 18 (31%) of the respondents above 45 years and 17 (30%) of the respondents are 36-45 years of age.

This information was sought to know about age of the respondents which helps to show how much the respondents are energetic to carry out their duties. Here the majority are youngsters who are energetic enough to discharge their assignment.

Table 4: Respondents Work experience in the organization

Work experience	No of Responses	
	Frequency	Percent
Less than 5 years	11	19.5%
5-10 years	19	33%
11- 20 years	11	19.5%
Above 20 years	16	28%
Total	57	100%

Source: Research Data, 2012

This table of respondents work experience in the organization above shows that 33% of the respondents have worked for 5-10yrs, 28% of the respondents for above 20 years, 19.5% of the respondents for 11- 20 years, and 19.5% of the respondents have worked for less than 5 years in the organization.

This information was sought to know about work experience of the respondents in the organization which helps to show how much the respondents have expertise knowledge on the activities they perform.

Table 5: Respondents by Position

Position	No of Responses	
	Frequency	Percent
Junior professionals	28	49%
Senior professionals	18	32%
Managers	11	19%
Total	57	100%

Source: Research Data, 2012

This table of respondents by position above shows that 49%, 32%, and 19% of the respondents are junior professionals, senior professionals, and managers respectively. This helps to know about the respondents' degree of responsibility.

Respondents were asked to put their opinion on the statements of the questionnaire among the given scales that apply in order to help the researcher to know the respondents view on the issues stated in the questionnaire. Their responses are shown in the tables below.

Table 6: Signing sales agreement between the enterprise and its customers without making creditworthiness analysis can have a serious negative impact on the supply of petroleum products in Ethiopia.

Scales	Responses						Total	
	Junior professionals		Senior professionals		Managers		Frequency	Percent
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Strongly Agree	8	14%	9	15.8%	4	7%	21	36.8%
Agree	11	19.3%	4	7%	5	8.8%	20	35.1%
Moderately Agree	8	14%	3	5.2%	2	3.5%	13	22.7%
Disagree	0	0	1	1.8%	0	0	1	1.8%
Strongly Disagree	1	1.8%	1	1.8%	0	0	2	3.6%
Total	28	49.1%	18	31.6%	11	19.3%	57	100%

Source: Research Data, 2012

Response to table 6 shows that 36.8% of the respondents strongly agree, 35.1% of the respondents agree, 22.7% of the respondents moderately agree, 3.6% of the respondents strongly disagree, and 1.8% of the respondents disagree that signing sales and purchase agreement between the enterprise and its customers without making creditworthiness analysis can have a serious negative impact on the supply of petroleum products in Ethiopia.

Table 7: The existing policies, procedures, and objectives for managing the credit sales are effective and adequate.

Scales	Responses						Total	
	Junior professionals		Senior professionals		Managers		Frequency	Percent
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Strongly Agree	1	1.8%	2	3.5%	0	0	3	5.3%
Agree	2	3.5%	4	7%	2	3.5%	8	14%
Moderately Agree	6	10.5%	5	8.8%	2	3.5%	13	22.8%
Disagree	14	24.5%	6	10.5%	5	8.8%	25	43.8%
Strongly Disagree	5	8.8%	1	1.8%	2	3.5%	8	14.1%
Total	28	49.1%	18	31.6%	11	19.3%	57	100%

Source: Research Data, 2012

From table 7 we can see that 43.8% of the respondents disagree that the existing policies, procedures, and objectives for managing the credit sales are effective and adequate and then followed by 22.8% of the respondents who moderately agree, 14.1% of the respondents are strongly disagree, 14% of the respondents agree, and 5.3% of the respondents only strongly agree that the existing policies, procedures, and objectives for managing the credit sales are effective and adequate.

Table 8: Selling the imported petroleum products to customers on credit basis without limit exposes the enterprise to high financial risks.

Scales	Responses						Total	
	Junior professionals		Senior professionals		Managers		Frequency	Percent
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Strongly Agree	8	14%	9	15.8%	3	5.3%	20	35.2%
Agree	10	17.5%	4	7%	8	14%	22	38.6%
Moderately Agree	5	8.8%	4	7%	0	0	9	15.8%
Disagree	5	8.8%	1	1.8%	0	0	6	10.5%
Strongly Disagree	0	0	0	0	0	0	0	0
Total	28	49.1%	18	31.6%	11	19.3%	57	100%

Source: Research Data, 2012

Response in the questionnaire table 8 shows that 38.6% of the respondents agree, 35.2% of the respondents strongly agree, 15.8% of the respondents moderately agree, and 10.5% of the respondents are disagree that selling the imported petroleum products to customers on credit basis without limit exposes the enterprise to high financial risks.

Table 9: The enterprise considers both the internal and external changes affecting its credit sales management.

Scales	Responses						Total	
	Junior professionals		Senior professionals		Managers		Frequency	Percent
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Strongly Agree	1	1.8%	2	3.5%	0	0	3	5.3%
Agree	4	7%	4	7%	2	3.5%	10	17.5%
Moderately Agree	5	8.8%	4	7%	6	10.5%	15	26.3%
Disagree	17	29.8%	8	14%	3	5.3%	28	49.1%
Strongly Disagree	1	1.8%	0	0	0	0	1	1.8%
Total	28	49.2%	18	31.5%	11	19.3%	57	100%

Source: Research Data, 2012

According to table 9 we can see that 49.1% of the respondents disagree, 26.3% of the respondents moderately agree that the enterprise considers both the internal and external changes affecting its credit sales management. On the other hand, we have 17.5% of the respondents agree, 5.3% of the respondents strongly agree and 1.8% of the respondents who strongly disagree that the enterprise considers both the internal and external changes affecting its credit sales management.

Table 10: The policies, procedures, and objectives for managing the credit sales consider the most important aspects to safeguard the collection of receivables.

Scales	Responses						Total	
	Junior professionals		Senior professionals		Managers		Frequency	Percent
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Strongly Agree	2	3.5%	3	5.3%	0	0	5	8.8%
Agree	0	0	1	1.8%	1	1.8%	2	3.6%
Moderately Agree	7	12.3%	4	7%	2	3.5%	13	22.8%
Disagree	15	26.3%	9	15.7%	5	8.7%	29	50.7%
Strongly Disagree	4	7%	1	1.8%	3	5.3%	8	14.1%
Total	28	49.1%	18	31.6%	11	19.3%	57	100%

Source: Research Data, 2012

This table reveals that 50.7% of the respondents disagree and 22.8% of the respondents moderately agree that the policies, procedures, and objectives for managing the credit sales consider the most important aspects to safeguard the collection of receivables.

We have also 14.1% of the respondents strongly disagree 8.8% of the respondents strongly agree and 3.6% of the respondents who agree that the policies, procedures, and objectives for managing the credit sales consider the most important aspects to safeguard the collection of receivables.

The following facts were drawn out from the results presented above.

- Credit sales without making creditworthiness analysis can have a serious negative impact on the supply of petroleum products in Ethiopia.
- The existing policies, procedures, and objectives for managing the credit sales are not effective and adequate.

- Selling the imported petroleum products on credit basis without limit exposes the enterprise to high financial risks.
- The enterprise has problems in considering internal and external changes affecting its credit sales management.
- The policies, procedures, and objectives for managing the credit sales doesn't consider the most important aspects to safeguard the collection of credit sales/receivables.

4.2 DISCUSSION

The management of financial risks with emphasis on credit sales is one of the dominant themes for business organizations. The ability to manage risks is a source of competitive advantage and a way to add value for governmental and private firms. From the review of existing definitions many researchers have made theoretical and methodological advances in financial risk management. There has been less progress in the management of financial risks with emphasis on credit sales across business organizations other than banks and credit unions. This study demonstrated that the management of financial risks with emphasis on credit sales in Ethiopian Petroleum Supply Enterprise. This is especially the case in the credits granted to customers by nonbanks and credit unions. The main objective of the study was to assess the management of financial risks in Ethiopian Petroleum Supply Enterprise With emphasis on credit sales.

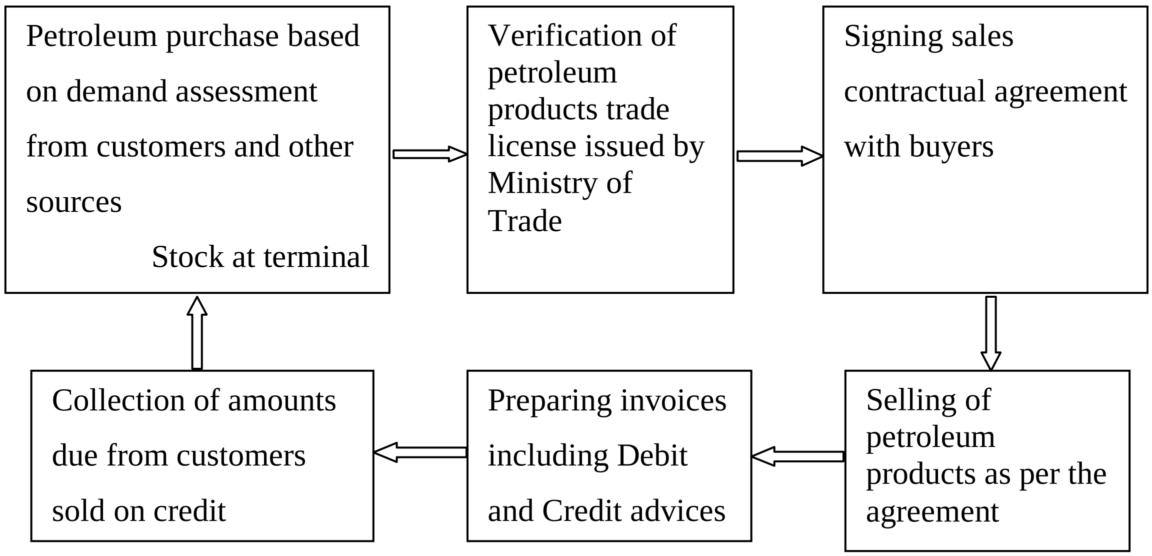
The results of the primary and secondary data about the three elements were used for the discussion on this topic to assess the management of credit sales of EPSE based on the secondary data about credit sales and collection. Here the result of the research data on creditworthiness analysis, credit sales, and collection leads to the need of setting criteria to provide or extend credit period for customers in the form of making creditworthiness analysis before allowing credit period to a customer. This information can be used for improving the customer selection process and the management of payment conditions and thus it can minimize the financial risks that can occur due to the nonpayment of customers. Hence, firms may decide whether or not to grant credit.

The practices are described using a seven years credit sales and collection histories, which is originated from the enterprise's sales and collection operation. The results show that the Ethiopian Petroleum Supply Enterprise has no a means to secure the collection of its receivables. There is no creditworthiness analysis. The enterprise provides a thirty days open credit period to each customer uniformly and sells the whole petroleum products on a 100% credit basis without limit. Here there is no guarantee as to the collection of the amount sold.

The interview made with the top management members and group discussion conducted with sales and collection experts indicated that the enterprise's credit sales management is not up to date. The credit period and the overall procedures, policies, and objectives were set nine years ago and it is being implemented as usual. Even though the transaction is in billions, there is no creditworthiness analysis, no credit limit, no revision of agreements timely and no measure is taken up on delay of customers in settling their dues except the interest penalty which is very much insignificant comparing to the principal amount. Nevertheless, things in this world especially the business market is under a continuous change alarming everyone to coup up with.

It must be considered that the result presented in this paper was based on the research data which comprises the primary data and credit and collection histories as a secondary data. This implies that there is no guarantee to safe guard or secure the collection of the amount due from customers. Hence, measures should be taken and improved by relating the payment histories to the respective histories of collection activities. By combining the payment and collection histories it would be possible to differentiate between good and bad customers based on their creditworthiness analysis made before and actual payment behavior. The improvement in the management of credit sales would directly lead to an improved collection of accounts receivable and thus reduce the exposure to financial risk.

Credit Sales Management Process in EPSE



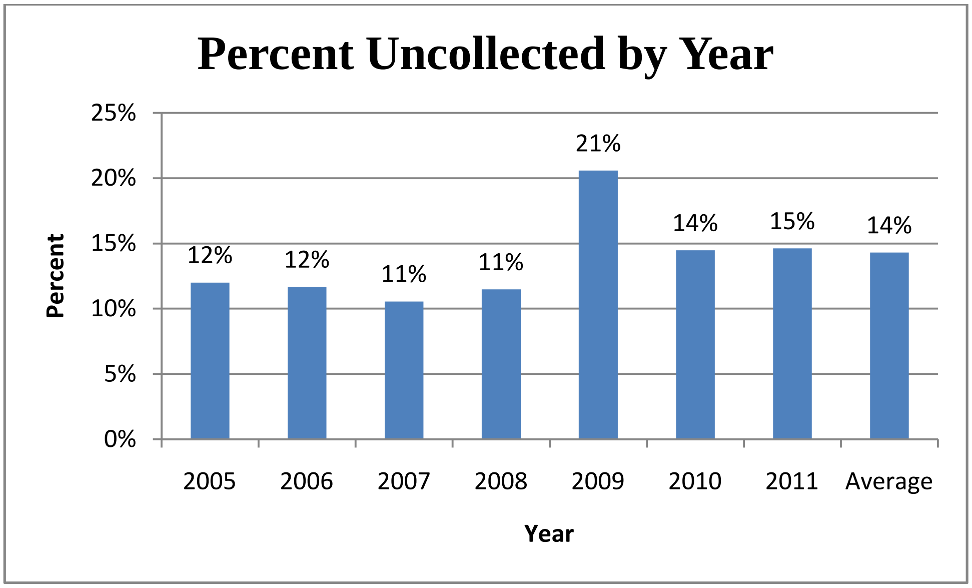
The petroleum supply and sales sector of the EPSE operations manual contains the outline of procedures for the petroleum purchase, verification of petroleum products trade license issued by MOT (Ministry of Trade), signing sales contractual agreement between seller and buyers, selling of petroleum products as per the agreement, preparing invoices including Debit and Credit advices and Collection of amounts due from customers used across the enterprise. However, the existence of such procedures does not necessarily mean, that credit sales risk is being managed. Consequently, there is a need to ensure that the management of financial risks with emphasis on credit sales.

Table 11: Seven Years (2005-2011) Sales and Collection Summary

Years	Sold (1)	Collected (2)	Remaining (3)=(1)-(2)	Percent (3/1)
2005	4,770,528,462	4,197,725,821	572,802,641	12%
2006	6,167,917,423	5,448,150,182	719,767,241	12%
2007	8,848,528,412	7,914,316,874	934,211,538	11%
2008	12,050,139,461	10,667,333,471	1,382,805,990	11%
2009	13,032,050,802	10,349,737,067	2,682,313,735	21%
2010	19,192,021,608	16,415,482,493	2,776,539,115	14%
2011	27,575,653,749	23,544,968,437	4,030,685,312	15%
TOTAL	**91,636,839,917**	**78,537,714,345**	**13,099,125,572**	**14%**

Source: EPSE annual financial report

In a seven years time the enterprise has sold Birr91,636,839,917 on credit. If we divide it by seven years (91,636,839,917/7) we get 13,090,977,131 average annual sales. Again if we divide the average annual sales to 12 months (13,090,977,131 /12) then we get 1,090,914,761 monthly average sales. The enterprise's sales has grown up from year to year. The percentage of sales for the years 2005 through 2011 was 5%, 7%, 10%, 13%, 14%, 21%, and 30% respectively. As the sales volume increases no doubt the risk also increases.



The trend of the remaining uncollected amount has also increased proportional to the sales volume. The enterprise's annual average uncollected amount was Birr1,871,303,653 (13,099,125,572/7). As indicated in the seven years sales and collection summary table the uncollected amount has increased from year to year. The percentage of the remaining amount for the years 2005 to 2011 was 12%, 12%, 11%, 11%, 21%, 14%, and 15% respectively. On average 14% of the sales made within seven years was remained uncollected for about six months and above. The length of the existing thirty days credit period is one reason for increasing the uncollected amounts of receivables. This has created a negative impact on financing the supply of petroleum products. The reason for this problem was the nonpayment of customers as per their agreement. Even though, the actions to be taken for the failure that may happen in fulfilling the sales contractual agreement are indicated no action is taken accordingly by the seller (EPSE). Besides, the guidelines for extending credit period and the credit control functions indicated in chapter two (literature review) page 20 and 21 of this study are not adopted before providing credit and entering in to sales contractual agreement.

The average credit period of petroleum distributing companies is found to be 8 days. A research conducted by team members from the ministry of trade and petroleum supply shows that the average credit period that petroleum distributing companies in Ethiopia provide to their customers is 8 days. This implies that customer companies can collect their money from sales within a shorter time comparing to the thirty days credit period granted by EPSE. The average

collection period (**ACP = Receivables/ Daily sales) or d**ays sales outstanding (DSO = 365 x accounts receivable balance/annual sales) for the years under consideration was
44, 43, 39, 42, 75, 53, and 53 respectively. The **ACP** or DSO is found to be 50 (44+43+ 39+ 42+75+53+ 53/7) which is quite longer than the enterprise’s thirty days credit period policy. The reason behind was because of the huge amount of remaining uncollected receivables. The current ratio of the petroleum supply business is 1:1 which is less than the recommended risk ratio. As a conventional rule, a current ratio of 2-to-1 (current assets twice of current liabilities) or more is considered to be satisfactory Pandey, (1981, p 506). These information give direct indication on how serious the problem is and the need to improve the overall credit sales risk management and collection policy. In other words the practice of credit sales /receivables management and the lessons that EPSE can learn is that the level of the enterprise’s credit sales risk is found to be very high and there is no mechanism used by the enterprise to identify, mitigate, and manage it.

CHAPTER FIVE

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

5.1 CONCLUSION

In this study, the researcher tried to look at the management of financial risks in Ethiopian Petroleum Supply Enterprise with emphasis on credit sales. The aim of this study was to assess the management of credit sales risks by reference to EPSE, the practices of creditworthiness analysis, credit sales and collection aspects of the enterprise under consideration.

Questionnaires were administered to respondents who work under petroleum purchase, sales, finance, audit departments and management members to find out their opinions and views on the management of credit sales.

What the researcher deduced from this study is that the extent of the problem (the management of credit sales) of EPSE is very high which demands timely response to minimize the financial loss that may happen so as to achieve its mission driven objectives. There is a big gap between the desired and the current credit sales management and that should be addressed very soon. Failure in credit sales management can negatively impact the supply of petroleum products in Ethiopia. Because 90 percent of the Ethiopian transport sector is covered by these products which is the bottle neck of any business operation especially for countries like ours.

The evidences show that how serious the credit sales risk management is for importation and supply purposes of petroleum products in Ethiopia. 94.6% of the result of the responses indicated that signing sales agreement between the enterprise and its customers without making creditworthiness analysis can have a serious negative impact on the supply of petroleum products in Ethiopia. 57.9% of the responses disagree that the existence of effective and adequate policies, procedures, and objectives for managing credit sales. 89.6% of the responses agreed that selling the imported petroleum products to customers on credit basis without limit exposes the enterprise to high financial risks. 50.9% of the responses disagree that the enterprise considers both the internal and external changes affecting its credit sales management. 64.8% of the responses disagree that the policies, procedures, and objectives for managing the credit sales consider the most important aspects to safeguard the collection of receivables. Moreover, the average remaining uncollected amount of the enterprise's annual sales is found to be 2% (13,099,125,572 /7) which is Birr1,871,303,653 per year. This is too much and not tolerable amount. Since there is no clear risk management strategy, policies and risk appetite, credit sales remain as potential risk area of EPSE. The ACP or DSO is longer than the enterprise's credit period. Poor receivables management is reflected in high DSO Flinspach and Stuckey (12007, p. 17)

The case thus reinforces the idea that the enterprise is in need of credit sales risk management. In other words, credit sales risk management serves to identify and mitigate the potential threats to the strategic implementation targeted via the management of financial risks. The EPSE case study thus suggests that the management of financial risks with emphasis on credit sales may be a decisive mechanism which enables the enterprise to play its expected role in the economy by raising the awareness on credit sales risk in order to make a continuous and uninterrupted supply of petroleum products.

The enterprise's source of income entirely depends up on the sales of petroleum products credit sales. Therefore, proper management of credit sales is crucial to the health and survival of the firm so as to carry out the very reason for its existence.

Debate over the market share of petroleum products distributing companies in Ethiopia is beyond the scope of this study, but remains an interesting area for future research. Equally, further detailed studies of the attractiveness of the business and its profit margin would serve to enrich the debate.

5.2 LIMITATIONS OF THE STUDY

The problems of research design, interpretation of results and difficulties of generalising from findings are all acknowledged as limitations.

5.3 RECOMMENDATIONS

The following recommendations are made to the management and board of directors of the Ethiopian Petroleum Supply Enterprise and other interested parties to improve the enterprise's credit sales risk management in order to achieve its mission driven objectives and continue in the business.

1. Evaluate customer's credit worthiness based on the five C's of credit sales (character, capacity, capital, collateral, and conditions).

   Every customer has different financial and creditworthiness background that the company deals with and when it joins the petroleum products supply business that has a huge business transaction made on an open thirty days credit period. Creditworthiness analysis should be made to know whether the company is creditworthy or not. It is checking the ability of the customer to pay its dues that will determine how it will continue as a customer in the business. By doing so, the enterprise can understand the customer's liquidity (risk) ratio before making any decision on providing credit period.
2. Grant credit only to the customers who are creditworthy.
3. Calculate the liquidity and risk ratios from the financial statements obtained during the evaluation of customer's creditworthiness analysis.
4. Set credit limits for every customer.

The existing practice is selling the whole petroleum products on a thirty days open credit period without limit. As a result the enterprise is exposed to high financial risk emanated from its credit sales. Hence, setting credit limits for every customer may serve to minimize the potential consequences of the risks on credit sales.

5. Reduce the credit period from thirty days to fifteen days.

The length of the credit period also matters in the management of credit sales risk. As the credit period becomes shorter, it encourages the control over credit sales collection within a shorter time period through a close follow up. This may enable the enterprise finance the supply of petroleum products at the right time, quantity and quality.

6. Introduce cash sales.

   Out of the total imported products some quantity need to be sold on cash basis in order to minimize financial risks created from credit sales that can happen due to the nonpayment of customers.

7. Revise the contractual sales agreement every year to coup up with the current situation.

   In the present situation where things are rapidly changing especially in business requires a continuous revision and adjustment of activities to minimize credit sales risk.

8. Avoid treating all customers uniformly.

   The extension of credit period should be made based on the creditworthiness of the customer. Differentiate between good and bad customers accordingly.

9. Establish a separate credit sales/receivables section to manage collection in its appropriate way.

   Since petroleum products distributing companies are increasing in number and the transaction is made in ten billions of Birr, it is necessary to establish a separate credit sales/receivables section with a sole responsibility of credit sales/receivables management.

10. Use advanced accounting soft ware suitable for the nature of the operation to manage credit sales/receivables.

11. Design and implement a sound credit policy by determining the credit period, collection policy and the measure to be taken for late payment.

    Policies, procedures, and objectives for managing the credit sales risk should be defined, approved and implemented.

12. Take action as per the agreement signed between the seller (EPSE) and the buyer companies.

    Ones an agreement is signed reasonably between the two parties, action should be taken accordingly at the time of the nonpayment of the customer.

13. Monitor your receivables position using the average collection period and the aging schedule at a regular basis.

14. Follow the steps of risk management process i.e identify, analyse, evaluate, treat, monitor and review, and communicate and consult risks while managing credit sales.

15. Assign risk management team.

    Since, EPSE,’s credit sales is exposed to risk a team consisting of adequately qualified managers and experts from petroleum purchase, sales, and finance functions accountable to the enterprise’s CEO should be assigned to reduce its negative consequences.

16. Learn other countries experiences of the same nature on the management of credit sales/Receivables

References

Abe W.Bear S. (2009), Accounts Receivable, Unlimited Alternative to Money, Advisory. Retrieved from **www.stafda.org.** *on 08/10/2012*

Arrow James (2008), Knowledge-Based Proactive Project Risk Management: AACE International Transactions. Retrieved from ***project.management6.com/KnowledgeBased-Proactive-Project-Risk*** *on 28/10/2012*

Australian/New Zealand Standard (AS/NZS 4360:1999), Risk Management, Standards Association of Australia. Retrieved from **www.schleupen.de/A.4.1.4_Australia_and_New_Zealand_Method** *on 09/10/2012*

Banerjee Shantanu, Dasgupta Sudipto, and Kim Yungsan (2007) Buyer-Supplier Relationships and Trade Credit: Retrieved from ***papers.ssrn.com/sol3/papers.cfm?abstract_id*** *on 10/10/2012*

Barnes Richard (2009), Evaluating Risk Appetite: A Fundamental Process of Enterprise Risk Management, a division of The McGraw-Hill Companies, Inc. (S&P). Retrieved from **www.ma.hw.ac.uk/~andrewc/.../SandP_Evaluating_Risk_Appetite.pd** *on 11/10/2012*

Bhalla V.K. (2002), Financial Management and Policy. Publisher, Anmol Publications Ltd.

Bolten Steven E. Conn Robert L. (1981), Essentials of managerial finance: Principles and practice, Houghton Mifflin Company

Britton Neil R. (2000), Risk Management overview: World bank Study Tour, New Zealand. Retrieved from **www.unisdr.org/6thCGDRMProgramsforPriorityCountrie** *on 12/10/2012*

Chandra Prasanna (2008),FinancialManagement theoryandpractice.TataMcGrawHill, India

Conrow Edmund H. (2003), Effective risk management: Some keys to success: The American Institute of Auronautics and Astronautics.

Delannay Anne F. and Weill L. (2004), The Determinants of Trade Credit in Transition Countries. Retrieved from **www.univ-orleans.fr/deg/GDRecomofi/.../delannay_weill_nice.pdf** *on 13/10/2012*

Department of finance (2004), Risk Management Guidance for Government Departments and Offices. An Roinn Airgeadais. Retrieved from

eustructuralfunds.gov.ie/files/.../Circular.pdf *on 150/10/2012*

Dunne Edwina (2008), Risk Assessment Tool and Guidance (Including guidance on application) Retrieved from **www.hse.ie/eng/about/Who/.../Quality_and.../riskoctober.pdf** *on 16/10/2012*

Embrechts Paul Frey R¨udiger and McNeil Alexander (2006), Quantitative Risk Management: Concepts, Techniques and Tools, University of Leipzig

Ernst & Young (2010) Risk appetite: The strategic balancing act, EYGM Limited. Retrieved from ***www.ey.com/Risk_appetite...strategic_balancing_act/*** *on 17/10/2012*

Farell John (2009), Undestanding and articulating risk appetite, audit-tax-advisory. Retrieved from **www.kpmg.co.uk/pubs/Understanding_Risk.pdf** *on 11/10/2012*

Flinspach Karin and Stuckey Francyn (2007) Receivables management: the untapped frontier Retrieved from **www.transactionservices.citigroup.com** *on 18/10/2012*

Hart Barry (2004) Risk management, Australian/New Zealand Standard-AS/NZS 4360:2004, Retrieved from ***cid.bcrp.gob.pe/biblio/Papers/ASNZS4360SETRiskManagement*** *on19/10/2012*

Iichiro Uesugi and Yamashiro Guy M. (2004), How Trade Credit Differs from Loans Evidence from Japanese Trading Companies, Research Institute of Economy, Trade and Industry Discussion Paper Series 04-E-028. Retrieved from **www.rieti.go.jp/jp/publications/dp/04e028.pdf** *on 20/10/2012*

Institute of Management Accountants (2007) Enterprise Risk Management: Tools and Techniques for Effective Implementation, retrieved from ***poole.ncsu.edu/erm/documents/IMAToolsTechniques.pdf*** *on 21/10/2012*

Kew, Richmond, and Surrey (2009) Risk Management assessment framework: a tool for departments. Retrieved from **www.hm-treasury.gov.uk/riskmanagement_assessment_framework** *on 08/10/2012*

Kimmel Paul D., Weygandt Jerry J., Kieso Donald E. (2009), Accounting tools for business decision making. John willey & Sons

Kutsch Elmar (2010) Deliberate ignorance in project risk management**,** International Journal of Project Management, 28(3) 245-255 Retrieved from **https://dspace.lib.cranfield.ac.uk/Deliberate_ignorance_in_project** *on 22/10/2012*

Lafarge Olivier Poupart (2007), Risk management and internal control systems, Autorite

Des Marches Financiers (AMF). Retrieved from **www.amf-france.org/documents/general/9628_1.pdf** *on 23/10/2012*

Leitch Philip and Lamminmaki Dawne (2009), Refining Measures To Improve Performance Measurement Of The Accounts Receivable Collection Function, Griffith Business School. Retrieved from **www.cmawebline.org/JAMARvAccounts_Receivable_Collect** *on 24/10/2012*

Levine Audrey B. and Young Richard (2009), Improving cash flow using credit management Chartered Institute of Management Accountants **(**CIMA). Retrieved from **www.cimaglobal.com/.../cid_improving_cashflow_using_credit_mg** *on 25/10/2012*

Maysami Ramin C. (2009), Understanding and Controlling Cash Flow Financial Management Series FM-4, Sangamon State University

Michel Crouhy, Dan Galai, and Robert Mark (2006), The essentials of risk management, Mc Graw-Hill Companies.

Nikolaou Kleopatra (2009) Liquidity (Risk) Concepts Definitions and Interaction Working Paper Series NO 1008 / FEBRUARY 2009. Retrieved from **www.ecb.int/pub/pdf/scpwps/ecbwp1008.pdf** *on 09/10/2012*

Pandey I.M., (1981), Financial Management Delhi: Vicas publishing house.

Poitras Geoffrey (2002), Risk management Speculation, and derivative securities: Elsevier Science (USA)

Schwarz Alexandra (2011), Measurement, Monitoring and Forecasting of Consumer Credit Default Risk, German Institute for International Educational Research Frankfurt am Main, Germany. Retrieved from ***elpub.bib.uni-wuppertal.de/edocs/dokumente/fbb/.../sdp11004.pdf*** *on 26/10/201*

Vagias, Wade M. (2006). Likert-type scale response anchors. Clemson International Institute for Tourism & Research Development, Clemson University.

Wyman Oliver C. (2007),What's your risk appetite? How much risk do you want to take? Retrieved from **www.oliverwyman.com/media/Risk_Appetite.pdf** *on 10/10/2012*

(ዮካቲት 2004 ዓ.ም) በኢነድ እና በነዳጅ አከፋፋይ ኩባንያዎች መካከል ያለው የነዳጅ ዱቤ ሽያጭ ጊዜ (credit period) ጥናት ሪፖርት

Appendices

A. Credit Sales Management

QUESTIONNAIRE

Dear respondents, first I would like to say thank you for your positive response and valuable cooperation. I appreciate your time and effort in filling out this questionnaire that only serves for my academic purpose in master of business administration (MBA) program. The topic of my research paper deals with the management of credit sales/receivables in the Ethiopian Petroleum Supply Enterprise (EPSE) which deserves due attention and prompt solution from the board of directors and the management who are responsible to manage risks. This study is assumed to add value on managing credit sales of the enterprise depending on reliable data to be collected from the respondent and other secondary sources.

I have tried to simplify the questionnaire in a way that respondents can manage it within not more than 15 minutes of time. Thank you again.

Remark**: put tick mark (✓) among the given scales that apply in its respective line in the box provided for each statement after completing the personal information part.**

Part I

Respondent's Personal information**:**

1. Academic qualification: Bachelor's degree ☐ Master's degree ☐

2. Gender: Female ☐ Male ☐

3. Age: Under 25 ☐ 25-35 ☐ 36-45 ☐ above 45 years ☐

4. Work experience: Less than 5 years ☐ 5-10 years ☐ 11-20 years ☐ above 20 years ☐

5. Position: Junior professional ☐ senior professional ☐ manager ☐

Part II

Credit sales management

1. Signing sales and purchase agreement between the enterprise and its customers without making creditworthiness analysis can have a serious negative impact on the supply of petroleum products in Ethiopia.

Strongly agree ☐ Agree ☐ Moderately agree ☐ Disagree ☐ Strongly disagree ☐

2. The existing policies, procedures, and objectives for managing the credit sales are effective and adequate.

Strongly agree ☐ Agree ☐ Moderately agree ☐ Disagree ☐ Strongly disagree ☐

3. Selling the imported petroleum products to customers on credit basis without limit exposes the enterprise to high financial risks.

Strongly agree ☐ Agree ☐ Moderately agree ☐ Disagree ☐ Strongly disagree ☐

4. The enterprise considers both the internal and external changes affecting its credit sales management.

Strongly agree ☐ Agree ☐ Moderately agree ☐ Disagree ☐ Strongly disagree ☐

5. The policies, procedures, and objectives for managing the credit sales consider the most important aspects to safeguard the collection of receivables.

Strongly agree ☐ Agree ☐ Moderately agree ☐ Disagree ☐ Strongly disagree ☐

B. Interview Questions checklist

For the EPSE management, credit sales and collection experts

1. What are the consequences of the existing thirty days credit sales in all financial aspects of the enterprise?

2. What was the justification to make all the sells (100%) on credit basis ? Why not some quantity on cash basis and some quantity on credit basis?

3. Would you suggest any other issues related to the credit sales and collection risk that needs a special attention?

C. Group Discussion Questions Checklist

1.How do you evaluate the existing credit sales management of the enterprise with regard to creditworthiness analysis, credit sales collection policies and procedures?

____

____

____

____

____

____

2.What are the major weaknesses of the credit sales management?

____

____

____

____

____

____

____

____

3.What do you recommend as a solution to improve the enterprise's credit sales management?

____

____

____

____

____

____

DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of ____________________. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

_________________________ _______________________

Name Signature

St. Mary's University College, Addis Ababa **February, 2013**

ENDORSEMENT

This thesis has been submitted to St. Mary's University College, School of Graduate Studies for examination with my approval as a university advisor.

__________________________ _______________________

Advisor Signature

St. Mary's University College, Addis Ababa February, 2013