

**FINANCIAL DISTRESS AND PROFITABILITY OF IRON AND
STEEL MANUFACTURING FIRMS IN KAMPALA
INDUSTRIAL AND BUSINESS PARK (KIBP)**

BY

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DECLARATION

I, Ngolobe Isaac Malaba, declare to the best of my knowledge that, this dissertation on “*Financial Distress and Profitability of Iron and Steel Manufacturing Firms in Kampala Industrial and Business Park (KIBP)*” is my own work towards the degree of Masters of Business Administration and that, it contains no materials previously published by another person nor materials which have been accepted for the award of any other degree, except where due acknowledgements are made in the text.

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APPROVAL

This is to certify that this dissertation entitled “*Financial Distress and Profitability of Iron and Steel Manufacturing Firms in Kampala Industrial and Business Park (KIBP)*” by Isaac Ngolobe Malaba was conducted under our supervision and is now ready for submission to the Graduate Examinations Board of Kyambogo University, in partial fulfillment for the award of a Master’s Degree in Business Administration with our approval.

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PRINCIPAL SUPERVISOR

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SECOND SUPERVISOR

DEDICATION

I dedicate this piece of work to Almighty God, my creator, my strong pillar, my source of inspiration, wisdom, knowledge, skills, understanding, good health in life and His enabling strength he bestowed onto me in completing this Master's Degree thesis.

May His Name be Glorified Forever and ever, Amen.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA	:	Analysis of Variance
AP	:	Account Payables
APP	:	Accounts Payable Period
ARP	:	Accounts Recoverable period
BBR	:	Bureau of Business Research
CCC	:	Cash Conversion Cycle
CMA	:	Capital Market Authority
EAC	:	East African Community
EBIT	:	Earnings Before Interest and Taxes
GDP	:	Gross Domestic Product
GNI	:	Gross National Income
ICP	:	Inventory Conversion Period
KIBP	:	Kampala Industrial and Business Park
NPL	:	Non-performing Loan
NSE	:	National Security Exchange
OAG	:	Office of the Auditor General
ROA	:	Return on Assets
ROE	:	Return on Equity
ROI	:	Return on Investment
RRM	:	Roofings Rolling Mills
SAIL	:	Shumuk Aluminium Mills
SMEs	:	Small and Medium Enterprises
SPSS	:	Special Package for Social Scientists
SRM	:	Steel Rolling Mills
STIL	:	Steel and Tube Industry Limited
UBoS	:	Uganda Bureau of Statistics
UIA	:	Uganda Investment Authority
UK	:	United Kingdom
UMA	:	Uganda Manufacturers Associations
UNCTAD	:	United Nations Conference on Trade and Development
UNIDO	:	United Nations Industrial Development Organization
USA	:	United States of America
USE	:	Uganda Security Exchange
NPA	:	National planning authority
UISM	:	Uganda Iron and Steel Manufacturing Association

ABSTRACT

This study examined the effect of financial distress on profitability of iron and steel manufacturing firms in Kampala Industrial and Business Park. The study was guided by specific objectives which were to; establish the effect of: Accounts Payables period, Accounts Receivables, Inventory conversion period on profitability of steel iron and steel manufacturing firms in KIBP.

The study adopted a case study design with both qualitative and quantitative approaches. The population consisted five iron and steel manufacturing firms and 20 financial managers. The sample of managers size was determined using Yamane (1967) formula. An interview guide and financial statements of four iron and steel firms for the period 2014-2018 were used data collection. Both trend analysis and regression models were used to regress financial distress constructs with profitability.

The study results indicated that accounts payables period (adjusted $R^2 = .015$), Accounts Receivables period (adjusted $R^2 = .019$) and Inventory period (adjusted $R^2 = .023$) as financial distress measures affected profitability of iron and steel manufacturing firms.

The study concluded that, foreign exchange of Ugx.3.44trillion is lost on sourcing inputs yet consumption was low as 15kg of steel per annum to enhance profitability. Because of lengthy ARP, even if more 20 more industries at a cost of \$3.6b (13.5trillion) join iron and steel industry by end of 2018, employment, local intent, tax revenue of 500millions per annum remains a dream. Squat profits resulting from continued financial distress renders realization of middle income status of Ugx. 290,000per month and Ugx.3.9m per year, reducing poverty from 21.4% to 14% by 2020 is un realistic, loan capital of Ugx.545b from Exim bank-china to boosting manufacturing is a reveries.

The study advocates for finance managers of steel companies to establish long-term relationship with creditors and suppliers in bid to shorten APP and ICP. Board of directors and management of steel firms should manage their payables prudently to remain profitable and competitive. The study suggests that further research should be conducted to substantiate qualitative factors such as how changes in management, market trends affect profitability of manufacturing firms in KIBP.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study provided an analysis of how Ugandan manufacturing firms experienced financial distress in managing their working capital and its effect on the firm's profitability. In this regard, the study sought to assess the extent to which continuous financial distress affects profitability of manufacturing firms. Uganda finds it difficult to attain middle- income economy status (GNI per capita between \$1,006 and \$3,955, World Bank atlas-2018) through its dream Vision 2040, when over 65 firms are financially distressed and earn meager profits. When the manufacturing sector started taking shape in post-liberation Uganda, optimism and hope gripped both the investors and government. The former anticipated a steady flow of ROI and employment while the later hoped for expanded tax base, jobs for the citizenry and a boost to the manufacturing to GDP ratio. Continued financial distress has propelled manufacturing firms to pay low salaries and wages, delay payment to suppliers and worse off default huge billions of money borrowed from different banks making them to collapse. Hence, there was need for the study to evaluate strategic mechanisms that can best revitalize the industrial sector's profitability. This study's central guiding question is simple: What industrial policy framework can propel industrialization in Uganda? Therefore, this chapter presents the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, scope of the study, significance of the study, definition of key concepts and the conceptual framework.

1.1 Background to the Study

1.1.1 Historical Perspective

Historically, the evolution of the term financial distress has flooded in the world markets like the United States of America since 1930's. But even before, the problem of financial distress caused some large companies to file for bankruptcy. in 1930, the Bureau of Business Research (BBR) studied and published a mechanism for identifying firms' failure based on accounting ratio analysis. Understanding the potential of financial distress in emerging stock markets became even more renown during the global financial crisis that occurred in 2007 seen with the collapse of the investment bank, Lehman Brothers on September 15, 2008 (Nanayakkara, 2014).

Worldwide, financial crisis has already thrown many companies out of business. USA, UK, to Asia to mention but a few, have had firms financially distressed. Forinstance in China, 212 Chinese listed

companies were financial distressed between 1998 to 2005 (Li, 2009, 2012) and 107 firms in the period 2006-2010 (Geng, Bose & Chen, 2015). Across the globe, prediction of corporate financial distress is a subject which has gained a great deal of interest by researchers in finance since the 1960s. Beaver (1966) cited in Zeytinoglu and Akarim (2013) compared the financial ratios of 79 failed firms with the ratios of 79 matched firms up to five years before the matched firms actually failed (Makini, 2015). Recently, the World manufacturing countries such as China, Spain, Europe, UK, USA, Sri Lanka, Italy, Asia (Palatine and Malaysia) have experienced corporate failures such as Enron Corp, WorldCom, Xerox, Lehman Brothers, AIG, and Freddie due to the likely occurrence of financial distress. Of late, the annual flow of failures of companies has not stopped growing and this trend has become more ear marked among iron and steel firms in Uganda (Sami, 2014).

Despite the rise of the global manufacturing output by 3.7 percent in the first quarter of 2017, decelerating the 2-year stagnation growth performance level and building on a sluggish of 2.6 percent in 2016, the major industrialized world economies (that is China, Germany, Japan, U.S.A and the Republic of Korea), performed below 7.0 percent of the industrial average (UNIDO, 2017). Little or no studies have been conducted to provide vivid evidence on whether the slow growth is attributed by financial distress and declining profitability in developed countries.

In sub Saharan African countries such as Zibambwe, Ethiopia, Ghana, cases of corporate failures have been examined among Banks and Construction firms. These firms experience high cost of raw materials and high tax levy at early stages, which led to low cash flow and high loan default due to financial distress (Appiah, 2011). A point in case is cited in Zimbabwe where, since 2011, a total of 458 companies closed shop in the manufacturing sector, rendering 988 people jobless. This necessitated the need for predicting failure as early as possible to reduce the costs of bankruptcy, avoid failure to all stakeholders and contribute towards the business and financial environment stability (El-Kalak & Hudson, 2016; Muhammad, Adiana and Karren 2018). Manufacturing firms are financially distressed and he cites the route course being; cost and shortage of capital, cost of importing raw materials, inadequate and costly infrastructure such as power and water.

Even though the level of growth in developing countries has been continuously higher than in industrialized countries, the threat of a slowdown remains looming over developing economies as long as economic and political instability persists in industrialized countries (UNIDO, 2017). Both formal

and informal manufacturing report a very low share of GDP and slow motion momentum to profitability resulting from financial distress (Martin & Bwire, 2016). Similarly, in East Africa whereas manufacturing performance for Kenya averaged 6.8% with manufactured exports at 49% of the export merchandise, Tanzania's averaged 7% and 36.9% of exports merchandise, Uganda's was averaged 0.5% with 24% of the export merchandise for 2016. Uganda's manufacturing sector's competitiveness index as compared to its peers in the EAC and this is not appealing (UMA, 2017).

In Uganda, Industrialisation started way back after World War II between 1945-1960 with processing industries and manufacturing enterprises when UK was foreign exchange starved. During the Postcolonial industrial development, 1962 – 1986, Uganda registered declining output in both light industries and the potential growth poles for heavy industrialisation due to the rise of Idi Amin who destroyed the economy and disorganised the industrial sector. Industrial development from 1986-to-date led to economic liberalism, Private sector led approach to industrialization, like the Uganda Investment Authority (UIA) was established in 1991 by the Uganda Investment Code, 1991 (amended in 1994) -a one-stop centre for the promotion of investments in Uganda (Obwona, Shinyekwa, Kiiza & Hisali, 2014). Industrialization played a peripheral role in Uganda's market-driven growth trajectory by improving GDP from 6.3 per cent in 1982 to 8.4 per cent in 1997. Thereafter, it declined to about 7 per cent below the average of 11 percent for least developed countries (United Nations Conference on Trade and Development (UNCTAD, 2018). Todate, industrial creditors specifically, Crane bank, global trust bank, green land bank, Nile bank, National Bank of Commerce exited the banking industry due to Non-performing loans owed by financially distress manufacturing firms earning meager profits. The report further reveals that Uganda's industrial growth declined from 5.1% to 1.6% and to 0.3% in the period June 2015, July 2016 and December 2017. The leading iron and steel manufacturing firms in KIBP perform below industrial average (46.32%) due to decreasing profitability backed by financial distress.

1.1.2 Theoretical Framework

The study was mainly coined by wrecker's theory of financial distress as coined by Opler and Titman (1994) cited in Umar, Nazir & Nawaz (2012) and was supplemented by Trade off theory. Wrecking is the act of withdrawing funds from already financially distressed firms who badly need the funds (Bas, 2014). The Investors withdraw resources from the firm as benefits which explain the process of pre-emptive destruction of a company before its value ultimately falls to a value beyond salvage. According

to Hirshleifer and Subrahmanyam (1998) cited in Wangige (2016), financially distressed firms' shareholders will only suffer opportunity cost if the firm recovers, however if it defaults on its obligations, the withdrawal of funds is deemed to be a free source of funds which can be reinvested somewhere else for an acceptable return (Kalckreuth, 2005). The relevance of Wreckers' theory of financial distress to this study is that it sought to explain the benefits that may step out of financial distress to stakeholders (Ulf, 2015). The theory also explains the entire pattern of results very well.

The second supporting theory to ground this study is the Tradeoff theory which reveals that firms have optimal debt-equity ratios, determined by trading off the benefits of debt with the costs (Tarek, 2013). The main goal of Tradeoff theory is to maximize the firm's value where debt and equity are used as substitutes. According to this theory, higher profitability decreases the costs of distress and also lets firms to increase their tax benefits by raising leverage. The applicability of this theory to the study is that manufacturing firms should prefer debt financing because of the tax benefit as opposed to the equity financing (Fama & French, 2002). Manufacturing firms can borrow up to the point where the tax benefit in debt is exactly equal to the cost that comes from increased probability (Jonathan & Olivier, 2012). Hence, the optimal capital structure represents a level of leverage that balances bankruptcy costs and benefits of debt finance. Although the trade-off theory, has gained consideration as an important determinant of a firm's optimal capital structure, a firm should not have debt level above a certain point because it's degree of financial distress begins to increase and costs associated with debt begin to overshadow benefits. Therefore, the firm attempts to maintain its capital structure at a balanced and optimal level (Hardiyanto, Achsani, Sembel & Maulana, 2014). Thus, the relevance of trade-off theory to this study is that an optimal capital structure at which the firm maximizes its value and minimizes its cost of capital exists can be attained when the benefits and costs of debt exactly offset (Tesfamariam, 2014).

1.1.3 Conceptual Review

Financial distress is a condition where a firm fails to meet or has difficulty in paying off its financial obligations to its creditors, typically due to high fixed costs, illiquid assets or revenues sensitive to economic downturns Schmidt (2010) cited in Wangige (2016). According to Hui (2011); Kazemian, Shauri, Sanusi, Kamaluddin and Shuhidan, (2017) financial distress is the mental or physical discomfort about the financial wellbeing of a firm. This covers a firm's capacity to manage economic

resources (such as income and savings), pay bills, repay debts and provide for the needs and wants of life.

According to Maina and Sakwa (2017) financial distress often entails three circumstances: (i) the condition of negative net worth, (ii) the inability to pay debts as they come due (insolvency), and (iii) a legal definition under which a firm continues to operate or liquidates under court protection (legal bankruptcy). A company under financial distress can incur costs related to the situation, such as more expensive financing, opportunity costs of projects and employees with low productivity margin. Employees of a distressed firm usually have lower morale and higher stress caused by the increased chance of bankruptcy, which would force them out of their jobs (Hu, 2011). Financial distress and bankruptcy are disruptive and costly and these two have got a very huge impact on the employees, shareholders, customers, suppliers, communities and the financial entities (Khaliq, Altarturi, Thaker, Harun & Nahar, 2014).

In competitive markets, firms need to generate positive profits in order to survive. The term profitability refers to the ability of a given business to earn a return from its investments (Zeli, 2014). Profitability ratios such as Earnings before interest and taxes to total assets (EBTA) measures profitability. Profitability analysis is considered as one of the best techniques for measuring productivity of capital employed as well as operational efficiency (Tulsian, 2014). The most common measure of profitability is the Return on Equity (ROE) measured as net income to common equity. High returns on common equity shows that companies use their equity to generate profits. The return on assets (ROA) is another measure of profitability and in this study it will be taken as the ratio of net income to total assets. It is conceived that firms can utilize their assets meritoriously not to go bankrupt. Profitable firms are more motivated to grow, because they do not only have the financial means to expand, but their ongoing profit creation abilities makes it possible not to undergo financial distress but to sustain growth (Delmar, Mckelvie & Wennberg, 2012). Although profitability, indicates how well management of an enterprise generates earnings by using the resources at its disposal, it is not clear as to whether high profit indicate sound organizational efficiency or low profitability signify organizational sickness.

Prolonged financial distress results in deteriorating profitability and consequently attribute to low levels of liquidity leading to failure to service banks loans, pay supplier timely as well as employees

(Ufo,2015). Long time financial distress is characterized by a sharp decline in the profitability margin/value, a drop in sales, changes in operating income and negative stock returns (Wennberg, Delmar & McKelvie, 2016). Financial distress plays a significant role in a firm's operation and profitability through the influence of cost implications, such as administrative and legal costs associated with the bankruptcy process (that is direct financial distress costs) or increased costs of debt i.e., indirect financial distress costs (Vintila & Nenu, 2016). Financial distress does not usually result in the firm's death. Firms normally deal with distress by: Selling major assets, merging with another firm, reducing capital spending and research and development, issuing new securities, negotiating with banks and other creditors, Exchanging debt for equity, Filing for bankruptcy (Hu, 2011).

1.1.4 Contextual Review

The Kampala Industrial and Business Park (KIBP), also referred to as Kampala Industrial Park, is an industrial and business park in Uganda, developed by the Uganda Investment Authority (UIA). The industrial park was created by act of parliament in 1997. An area measuring 894 acres (362 ha) [Office of the Auditor General, 2015]. The iron and steel firms located in KIBP with high indebtedness are: Steel and Tube Industries Ltd (STIL)-99bn, Shumuk Aluminuim Industries Ltd (SAIL) -32.01bn, Roofing Rolling Mills (RRM)-201bn and Steel Rolling Mills (SRM)-75.9bn whose low profitability were studied (Uganda Iron and Steel Manufacturers Association, UISM, 2018). Declining profitability among iron and steel firms was triggered by the arise in import of expensive raw materials characterized by short APP, high credit sales to government and its agencies that take longer to pay creating longer ARP and longer ICP due to power fluctuations, excess capacity at plant level, owing to infrastructural constraints as well as competition from EAC and global economy (Obwona, 2014). The declining profitability trend among four iron and steel manufacturing firms was occasioned by thrilling financial distress. Because of low profitability, the firms are unable to pay bank loans, dividends, suppliers of raw materials, pay employees very low wages. UMA and UBoS reports (2017) also support the view that manufacturing companies experience financial distress and are unable to plough back enough to pay obligations falling due. However, limited financial distress literature dearth not only in Uganda but also in the sub Saharan African context and the limited research is reported by Zulkarnain, (2009). Hence, this prompted the need to conduct a study to establish the extent to which financial distress affects profitability among iron and steel manufacturing firms in KIBP.

1.2 Statement of the Problem

Low profitability in the industrial sector triggered a 1.3% downturn in the country's economy; and a modest 23.2% contribution to the GDP in the third quarter of FY2015/2016 and unemployment increased by 40% (UBOS, 2017). At micro (firm) level, financial distress has been manifesting itself in forms of firm's failure or delay to meet their financial obligations to creditors (573.4 in 2015 and 389.6b in 2014 for banks, BoU statistic) and suppliers; plus, continuous profitability shortfalls (Muhumuza & Adengo, 2016). Industry experts attribute the rise and persistence of the problem to shortage of capital, high costs of sourcing inputs especially from abroad, inadequate and costly infrastructure, especially transport, power and water (World Bank Group, 2015). During the FY2016/17, all the sectors experienced slower growth compared to FY 2015/2016. Specifically, the Industry sector contracted from 4.7% in FY2015/16 to 3.4% in FY2016/17 making Uganda's economy to slow down to 3.9% (Nabisubi, 2017). As part of the remedy, Government of Uganda mooted the idea of forking out Ugx. 1.3 trillion (about \$351 million) to bail out financially distressed manufacturing firms (appendix III), majority of them owned by indigenous investors (Muhumuza, & Adengo, 2016 & Mukungu, 2016). But again, this has precipitated more problems in the tax paying community, including raising many questions, one of them being how can government do so prudently to maximize realisation of the intended aim of boosting industrialisation and its associated benefits? Secondly, can these financially distressed firms indeed become profitable? A research gap is further occasioned by scanty empirical studies that could provide evidence on the extent to which change in accounts payables, accounts receivables and change in inventory affect ROA, ROE and ROI of manufacturing firms in KIBP. It was against this background that this study was urgent and timely.

1.3 Purpose of the Study

The general objective of this study was to examine the effect of financial distress on profitability of iron and steel manufacturing firms in Kampala Industrial and Business Park (KIBP).

1.4 Objectives of the Study

The study was guided by the following specific objectives:

- i) To establish the effect of Accounts Payables period on profitability of iron and steel manufacturing firms in KIBP.
- ii) To establish the extent to which Accounts Receivables period affects profitability of iron and steel manufacturing firms in KIBP.

iii) To examine the effect of Inventory conversion period on profitability of iron and steel manufacturing firms in KIBP.

1.5 Research Questions

The specific objectives for this research were based on the research question stated as below:

i) What is the effect of Accounts Payables period on profitability of iron and steel manufacturing firms in KIBP?

ii) To what extent does Accounts Receivables period affect profitability of iron and steel manufacturing firms in KIBP?

iii) What is the effect of Inventory conversion period on profitability of profitability of iron and steel manufacturing firms in KIBP?

1.6 Scope of the Study

This covers content /subject scope, area/geographical scope as well as time/period scope as explained below;

1.6.1 Content Scope

The study focused on examining the effect of financial distress on profitability of iron and steel manufacturing firms in KIBP. Financial distress as the independent variable was measured by looking at: change in Accounts Payables, change in Accounts Receivables and Change in Inventory. On the other had profitability which the dependent variable was measured by looking at Return on Assets (ROA) = (Net Income/Total Equity), Return on Equity (ROE) = (Net Income/Total Assets).

1.6.2 Geographical Scope

The study was conducted from Kampala Industrial and Business Park (KIBP) among four iron and steel manufacturing firms [Steel and Tube Industries Ltd (STIL), Shumuk Aluminuim Industries Ltd (SAIL), Roofing Rolling Mills (RRM) and Steel Rolling Mills (SRM)]. KIBP is located in Namanve, Kira Municipality, Wakiso District. This location is approximately 15 kilometres (9 mi), by road, east of the central business district of Kampala. The study considered indebted steel manufacturing firms in KIBP.

1.6.3 Time Scope

The study covered financial period from 2014 to 2018. It is this period within which manufacturing firms experienced financial distress and profitability problems and therefore reliable data for this particular study was readily available in financial statements obtained.

1.7 Significance of the Study

The significance of the study will be based on the following perspectives: The policy (Government through Capital market authority), creditors and theoretical perspective (scholars) in different ways as explained below:

1.7.1 Policy Perspective

The study results may be used to advance knowledge to policy decision makers such as; government, Uganda Investment Authority, Uganda Iron and Steel Manufacturers Association, Capital Market Authority (Uganda Security Exchange) in developing policies and regulations that can be used to aid manufacturing firms prevent occurrence of financial distress by setting market trends that evaluate early symptoms of bankruptcy to enhance profitability.

1.7.2 Creditors

The study findings may be relevant to investors, who have different motives towards manufacturing businesses. Creditors such as banks may be able to use the results to evaluate financial health of such firms in order to determine their debt repayment potential and probability of default. Creditors (Suppliers) will be able to analyze firms' ability to meet its obligations and if not, develop strategies to settle obligations in case of bankruptcy.

1.7.3 Theoretical Perspective

The study will provide a basis upon which academicians/scholars can rely on as secondary data to boost the existing body of knowledge on financial distress and profitability of iron and steel manufacturing firms in KIBP.

1.8 Conceptual Framework

Independent Variable

Financial Distress

- Lengthier Accounts Payables period
- Prolonged Accounts Receivables period
- Elongated Inventory conversion period

Dependent Variable

Profitability

- Return On Assets (ROA)
- Return On Equity (ROE)

Extraneous Variable

- Uganda's Industrial policy framework (iron & steel manufacturing agenda)

Source: Adopted from Onur & Yelkenci, (2017)

Figure 1. 1: Conceptual Framework relating Financial Distress and Financial Performance

The conceptual framework above illustrates that the dependent variable is financial distress while the independent variable is profitability. Figure 1.1 above further illustrates that the constructs of financial distress as; Change in Accounts Payables period which entails such delays in paying suppliers characterized by loss of cash discounts and reduced trust by the suppliers (Nwakaego & Ikechukwu, 2015). A study by Mathuva (2010) found that an increase in the number of days payable by 1 day was associated with increased profitability. However, Deloof (2003) in Nwakaego & Ikechukwu, (2015) and Reheman and Nasr (2007) found that more profitable firms wait longer to pay their bills. This means that they withhold their payment to their suppliers so as to take the advantage of cash available for their working needs. Delaying payments to suppliers is in line with the working capital management rule that firms should strive to lag their payments to creditors as much as possible, taking care not to spoil their business relationships with them (Mathuva, 2010). On the other hand, the profitability constructs shall be measured by profitability ratios, such as Return on Assets (ROA) and Return on Equity (ROE) (Dong & Jhy-tay, 2010; Gill *et al.* (2010) & Lourenço, 2011). However, other extraneous variables like Uganda's Industrial policy framework (iron & steel manufacturing agenda) affects both the independent and dependent variable. The study held the extraneous variable constant, the researcher adopted a case study research design. The study tools were made objective as possible for suitability in shedding light on the key interplay between financial distress and Profitability of iron and steel manufacturing firms.

1.9 Definition of Key Operational Concepts

Financial Distress

Financial Distress Process also refers to a continuous process which befalls a firm when it fails to meet its obligation resulting to financial distress. It is a slow process which takes a long period and results to bankruptcy if no interventions are made.

Financial distress is a term used in general to indicate a condition when promises of a business entity to creditors are broken or honored with difficulty (Wangige, 2016).

Financial Distress refers to a situation when the firm's operating cash flows are not satisfying the Current Obligations of the Firm such as Trades Credit, Interest Expense among others.

Financial distress: Financial distress of a company usually refers to the situation where operating cash flow of a company cannot supersede the negative net assets of the firm (Geng, Bose & Chen, 2015). Financial distress is generally inability of a firm to pay its liabilities within appropriate time frame (Saleem, Muhammad & Umara, 2013).

Profitability: Profitability refers to a firm "ability to generate earnings (Lourenço, 2011).

Profitability is the net result of various policies and managerial decisions, and the profitability rates represent the net operating result of the combined effects of liquidity, asset management and debt management (Gill *et al.*, 2010).

Profitability is an indication of how a company's profit margins are associated with sales, capital and average capital (Greuning, 2005).

Profitability refers to a company's ability to generate an adequate return on invested capital. Companies are interested in their ability to use their assets efficiently to produce profits (and positive cash flows) [Wild, Larson & Chiapetta, 2007)].

Accounts receivable: Accounts receivable are customers who have not yet made payment for goods or services, which the firm has provided. In this respect account receivable is divided by sales. It represents the firms' payment from its customers.

Accounts Receivables refer to Short-term liabilities owed to suppliers for purchases made on credit.

Average Collection Period: It the days sales outstanding and it is the average amount of time that a company holds its accounts receivables (Ross, Westerfield, Jaffe & Jordan, 2008)

Accounts Payable: Accounts payable is suppliers whose invoices for goods or services have been processed but who have not been yet paid for. These represent the payables that the firm will pay from to customers (Samiloglu & Demrigunes, 2008). Otherwise Account payables =
$$\frac{\text{payable}}{\text{Cost of sales}}$$

Accounts payables are calculated as payables divided by purchases. The longer the value, the longer firms take to settle their payment commitment to their suppliers.

Accounts Payables : Raw materials, work-in-process, and finished product that the venture hopes to sell.

Average Payment Period: It is the time taken to pay firms' suppliers (Mathuva, 2010). It is the figure that measures the average amount of time that a company holds its accounts payable.

Inventories: Inventories stocks of raw materials, work-in- progress or finished goods waiting to be consumed in production or to be sold. Inventory is calculated as inventory/purchase. It reflects the stock held by the firm. Inventory refers to the value or quantity of raw materials, supplies, work in progress (WIP) and finished stock that are kept or stored for use as need arises (Ranachandran & Janakiraman, 2009).

Inventories: Firms which are not able to attract sufficient financial funds for their day-to-day operations (Ifeyinwa, Onekanma & Ukpere, 2014).

Cash conversion cycle (CCC): is the flow of cash from suppliers to inventories to accounts receivable and back into cash. It also refers to the time interval between the cash outlays that arise during the production of output and the cash inflows that results from the sale of the output and collection of the

account receivable. CCC is calculated by subtracting the payables the sum of the inventory conversion period and the receivable (Knauer & Wöhrmann, 2013).

A company's **credit policy** refers to the actions taken by a business to grant, monitor, and collect the cash for outstanding accounts receivable (Maysami, 2010).

Inventory Turnover in Days: It is the days sales inventory and is the figure that measures the average amount of time that a company holds its inventory (Ross, Westfield, Jaffe & Jordan, 2008).

Aggressive Financing Policy: It is defined as a working capital management policy that uses high levels of short term liabilities and low level of long term liabilities (Hussain, Farooz & Khan, 2012).

Aggressive Investment Policy: It is a working capital management policy that deals with the firm's active control and management of current assets with the aim of minimizing them (Hussain et al. 2012).

1.10 Chapter Summary

From the discussions above, Financial distress is an integral element of an institution's operational philosophy and increasingly is an instrument for improving a firm's performance. Insights from the presentation reveal that in Ugandan's context, few companies disseminate their financial distress reports and do not bother to publish the financial distress findings to depict the level of profitability. Although there is a general awareness of financial distress standards and policies among practitioners, most times these standards are not applied. Additionally, manufacturing firms lack support from senior management and regulatory bodies in regard to overcoming financial distress as a pandemic. A review of continuous financial distress aid to re-assess the business' goals and enables management to plan effectively. This effectiveness is either directly proportional or inversely proportional to the firm's profitability. Although a number of financial distress studies have been conducted, there is existed gaps to clearly explain its effect of profitability. In a nutshell, chapter one summarises the key concepts on the study background, statement of problem and legitimate purpose of the study as seen in the extracts of this chapter summary. Therefore, the preceding chapter discusses literature review to exploit these gaps necessitating further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews related literature advanced by different scholars in regard to financial distress and profitability. The information is obtained from a combination of extracts, paraphrased statements journals, articles, magazines, textbooks, pamphlets, websites, and other published dissertations related to predictor variables; Accounts Payables period, Accounts Receivables period, Inventory period and profitability of iron and steel manufacturing firms as the dependent variable. The flow of literature is organized consistently starting with conceptual review, followed by theoretical review and finally discussions, evaluation and an assessment of literature objective by objective while identifying gaps.

2.1 Conceptual Review

Various scholars provide varying definitions though with similar meanings as presented below;

2.1.1 Financial Distress

2.1.1.1 Definition and Meaning

Lemma and Wang (2012) relate financial distress to a situation where the firm's contract to creditors is broken or honored with difficulty. Financial distress falls in tight cash situations when the firm is not able to pay the owed amount within the due date. This is in line with the leverage position of a firm (Maina & Sakwa, 2012). If no interventions are injected, this condition can force a firm into bankruptcy or liquidation (Hu, 2011). This condition arises from wrong financial decisions made by firm managers, which in the long run affects operations of a firm (Filberk & Krueger, 2005). Financial distress relates to a broad concept with several situations in which a firm faces financial difficulty. These common situations defining financial distress include bankruptcy, insolvency and failure (Duda & Schmidt, 2010). This necessitated the need for this study to investigate whether the kind of financial distresses conceptualized above applies to iron and steel manufacturing firms in KIBP.

Similarly, financial distress is defined as “the inability of a firm to pay its financial obligations as they mature” Financial distress is the situation when a company does not have capacity to fulfill its liabilities to the third parties. Increasing non-performing loan (NPL) of commercial banks and delisted of public companies across the globe is a typical phenomenon of corporate financial distress (Hu, 2011). Financial distress makes manufacturing firms to take a downward spiral trend due to inadequate resource deployment, resulting to a weak strategic positioning evidenced by significant drop in sales,

poor profitability and decline in cash flow and liquidity levels (Wangige, 2016). The study sought to examine whether the cause of financial distress arises from internal organization problems characterized by financial signals resulting from weak performance.

Additionally, Outechever (2007) reveals that financial distress is a gradual dynamic process where a firm moves in and out of financial trouble as it passes out through various stages. These stages have specific attributes and consequences as they contribute differently to business failure. Financial distress varies with time. Therefore, as a firm enters one state, it does not stay in the same state until it recovers or is liquidated. There was need to conduct a study to establish whether iron and steel manufacturing firms in KIBP have experienced change in financial conditions triggering various transitions of financial distress and whether such conditions have aggravated into bankruptcy problems.

In support of the above definition, Aasen (2011) gives a probabilistic definition of financial distress as “the likelihood of bankruptcy, which depends on the level of liquid assets as well as on credit availability”. Abuga and Memba (2013) identify two forms of financial distress: the first one is default on a debt payment, and the second one is an attempt to restructure the debt in order to prevent the default situation. Financial distress is caused by a number of factors that include: economic turbulence, change in demand, high debt, restrictive monetary policy, high interest rates, inadequate capital structure and poor financial management (Mburu, 2014). This study was intended to acquit the root course of financial distress among Ugandan iron and steel manufacturing firms in KIBP.

In same vein with the above, Financial distress refers to the inability or unavailability of a fund to pay for obligations that have matured (Indonesian Institute of Accountants, 2012). Financial difficulties begins when a company cannot meet the payment schedule or when the cash flow projections indicate that the company will soon be unable to meet its obligations (Odero, 2014). There are several definitions of financial difficulties, according type, namely economic failure, business failure, technical insolvency, insolvency in bankruptcy, and legal bankruptcy (Khaira, 2014) as explained below:

Economic failure; Economic failure or economic failure is a situation where the company's revenues cannot cover the total cost, including the cost of capital. The business can continue to operate throughout the lenders would provide capital and its owner will accept return rate (rate of return) in the bottom of the market.

Business failure; Business failure is defined as a business that ceases operations with consequent losses to creditors.

Technical insolvency; A company is said to be in a state of technical insolvency if it cannot meet current liabilities as they fall due. Inability to pay the debt technically indicate a temporary lack of liquidity, which if given the time, the company may be able to pay its debts and survive. On the other hand, if the technical insolvency are the first signs of economic failure, this may step towards financial disaster.

Insolvency in bankruptcy; A company is said to be in a state of insolvent in bankruptcy if the debt book value exceeds the market value of assets. This condition is more serious than technical insolvency because, generally, it is economic failure sign, and even lead to the liquidation of the business. Businesses in insolvent circumstances do not need to be involved in bankruptcy claims legally (Ross, Westerfield & Jaffe, 2005). The researcher needed to investigate the extent to which iron and steel manufacturing firms in KIBP monitor their state of affairs at different stages; healthy state, impairment state, and recovery states to assess the level of indebtedness, bankrupt or financial distress. It remained unclear as to whether all these forms of financial difficulties apply to only iron and steel manufacturing firms in KIBP and possibly why?

In line with the above scholar, Aasen (2011) points out two types of financial distress costs. Direct bankruptcy costs comprising of legal and administrative costs, and indirect bankruptcy costs which relates to the difficulty of managing a firm during bankruptcy. Financial distress results into bankruptcy, liquidation and Insolvency. Bankruptcy is the legal status in an entity which cannot repay debts to its creditors; this may lead to liquidation or administration. Insolvency on the other hand, is a financial condition within an entity when its liabilities exceed the assets, a situation referred to as “balance sheet insolvency”. This calls for immediate action to rectify the situation in order to avoid bankruptcy. Such actions include minimizing overhead costs, negotiating current debts and debt repayments. Cash flow insolvency; entails lack of liquidity to honor debts when they fall due while balance sheet insolvency refers to presence of negative net assets within a firm (Rose *et al.*, 2005). This study seeks to establish the level of bankruptcy, liquidation and Insolvency attributed by continued financial distress among iron and steel manufacturing firms in KIBP. The study pursued to evaluate the different kinds of financial distress costs experienced by iron and steel manufacturing firms in KIBP

In congruence with the above, Financial distress affects investors causing loss of huge cash outflow (Baker, 2011). Many Business failures in both developed and developing economies arise from financial distress (Kemboi, 2013). According to Wangige (2016) creditors, suppliers and investors, react differently on firms facing financial problems. Suppliers, automatically discontinue granting credit to the firm due to fear of liquidation while creditors become less tolerant. Investors shun off from supplying additional capital to the distressed firms. There was therefore need to investigate the determinants of financial distress among iron and steel manufacturing firms in KIBP and investigate how financial institutions and suppliers react.

2.1.1.2 Financial Distress Prediction Models

Over the last four decades, academicians and practitioners have conducted enthusiastic studies on Financial distress without drawing consensual conclusions; Among the studies done includes, Akbar (2013) among others. Business failure prediction models remain unsolved puzzle to date. In addition, various models have been developed. Omelka, Beranová & Tabas, (2013) carried a study using Falmer and Toffler models in financial distress prediction suggesting superiority of Falmers' model in prediction. Altman, Sabato, and Wilson, (2010) conducted a multi- dimensional research on business crisis prediction. Altman model has several draw backs; it is an outdated model and would not be best to use in classification of todays' firm.

In addition, researchers using the model assume that their model is stable across economic conditions that change with time. The business environment in 1968 may not be the same as today. The model only relied on manufacturing firms which is not practicable today. The main demerit of Olson Logit model is that by use a dependent variable that is not binomial, the researcher is required to test the assumption of linearity before including it in the model (Bhandari & Iyer, 2013). Across the globe, both developed and developing economies experience business failure as problematical catastrophe. This could be caused by financial distress resulting from poor capital decisions, poor internal management, shortage of skilled labor and lack of access to credit (Wangige, 2016).

Another study by Bhandari and Iyer (2013) criticizes a determination of financial distress in terms of a single event. He argues that default cannot be defined synonymously with financial distress because a company bears the vast majority of losses and other adverse effects during the time preceding default or bankruptcy. Richardson, Taylor and Lanis, (2015) determines financial distress in terms of solvency.

He develops a theoretical model of corporate risk management in the presence of financial distress costs. Financial distress is seen as an intermediate state between solvency and insolvency. A company is distressed when it misses interest payments or violates debt covenants.

Companies under financial distress can incur costs related to the situation, such as more expensive financing, opportunity costs of projects and less productive employees (Fauziah, Nurain & Abidin (2017). The firm's cost of borrowing additional capital will usually increase, making it more difficult and expensive to raise the much needed funds. In an effort to satisfy short-term obligations, management might pass on profitable longer-term projects. Employees of a distressed firm usually have lower morale and higher stress caused by the increased chance of bankruptcy, which would force them out of their jobs. Such workers can be less productive when under such a burden (Umar & Sajid (2012).

2.1.1.3 Factors Contributing to Financial Distress

Financial distress is caused by a number of factors that include: economic turbulence, change in demand, high debt, restrictive monetary policy, high interest rates, inadequate capital structure and poor financial management (Sun, Huang & He, 2014).

In another study by Nanayakkara and Azeez (2015), the causes of financial distress of the company is more micro. The factors of the companies are: Difficulty cash flow; Occurs when the revenue receipts of the company's results of operations are not enough to cover expenses arising from activities of business operations. In addition to the cash flow difficulties can also be due to the fault of management when managing the company's cash flow, in paying the company's activities which can worsen the company's financial condition.

The amount of debt; Debt collection policy of the company to cover the costs resulting from the company's operations will create liability for the company to return the debt in the future. When bills are due, while the company did not have sufficient funds to pay the bills, then it is likely that creditors do is perform the confiscation of the company to cover the payment of the charge. Losses in company operations for several years. In this case the operational losses of companies which can give rise to a negative cash flow in the company. This can occur because the operating expense is greater than the income received by the company. Although a company can solve three problems mentioned above, is

not necessarily the company can avoid financial distress, it is because there are external factors that can lead to financial distress (Sun, Huang & He, 2014).

Alifiah, Salamudin and Ahmad (2013) identified external factors more macro level, where the scope is wider. The external factors may include government policies that can increase operating expenses borne by the company, such as increasing tax rates can increase the burden on companies. In addition there is a policy loan interest rate increases, which could lead to an increase in the interest expense of the company. Hui & Milind (2015) also stated that the factors that affect bankruptcy; namely: Age of the company, the longer the company exists, the less likely bankruptcy; the size of the company; the larger the company, the less likely bankruptcy, Growth, grown companies are more likely to survive; the macroeconomic conditions, the failure rate increased during the recession, Sector, the failure rate is high in some industrial sectors; Man, there is evidence that the rate of business failures is inversely proportional to the level of education, age and previous experience of the owner – manager; Type the company, there is a bit of a failure in franchising and the location, the failure rate is somewhat lower in rural areas.

2.1.2 Profitability

2.1.2.1 Concept and Measurement

Several scholars conceptualize profitability differently among them include: Sharma and Kumar (2011), Okelo (2013), Falope and Ajilore (2009), Samiloglu and Demirgunes (2008), Garcia-Teruel and Martinez-Solano (2007), Zariyawati et al. (2009), Sharma & Kumar (2011) and Wang (2002). In regard to this study the following definitions were upheld:

The word “Profitability” is modulation of two words “profit” and “ability”. In another words it referred to “**Earning power**” or “**operating efficiency**”. The concerned investment concept of profitability may also be defined as “The ability of a given investment to earn a return from its use”. Profitability is also not synonymous to efficiency. It is regarded as a measure of efficiency and management guide to greater efficiency (Barad, 2010). No doubt, profitability is an important yardstick of efficiency, though profitability cannot be taken as a final proof of efficiency. Sometimes satisfactory profits can mask inefficiency and conversely, a proper degree of efficiency can be accompanied by an absence of profit (Sharma & Kumar, 2011). This study examined the degree of efficiency of iron and steel manufacturing firms in KIBP.

Profit is a financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expenses, costs and taxes needed to sustain the activity. Profitability is a measure of evaluating the overall efficiency of the business. The best possible course for evaluation of business efficiency may be input-output analysis (Okelo, 2013). The study was intended to establish whether iron and steel manufacturing firms experienced greater the volume of profit with higher level of efficiency in KIBP.

Profitability refers to a company's ability to generate adequate return on invested capital. This means that for a business to be successful an ideal situation is to have adequate cash balances as well as healthy profit figures, that is, it should strive to be profitable and cash generative. For companies, often profit is the overriding objective but if cash is not sufficient, the company's growth will slump and there may be a threat to its survival (Sharma & Satish 2011). Thus, cash flow is absolutely critical for the existence and survival of an organization and a company generating healthy cash balances will invariably have high profitability. Companies are interested in their ability to use their assets efficiently to produce profits (and positive cash flows). Return is judged by assessing earnings relative to the level and sources of financing (Gill,*et.al*, 2010). The study was carried out to assess how profitability among iron and steel firms in KIBP results into solvency.

Wobshet (2011) believed that Profit is the main goal for establishing business concern. Profit is the primary motivating force for economic activity. Profit has to be earned and they have got to be earned on a regular basis. Business concerns that are unable to generate efficient profit from their operation cannot remunerate the providers of their capital and this makes it difficult for them to maintain the continuity of their existence. Profits are needed not only to remunerate capital but also to finance growth and expansion (Wild,2007). There was need to conduct a study to assess the need relevance of profitability of iron and steel manufacturing firms in KIBP.

Profitability ratios X-ray the profit making ability of the enterprise. The ratios may be calculated either on the basis of operating profit or net profit. These ratios are of two types first related to sales and second profitability (Hussain *et.al*, 2012). The main efficiency ratios are as given blow: Gross profit Ratio, Operating Ratio, Net profit Ratio, Earnings Per share, Return on gross capital employed, Return on net capital employed and Return on net worth. However, the key measures of profitability to be

undertaken in this study include: profit margin, return on total assets and return on common stockholders' equity (Rezazadeh & Heidarian, 2010). These are computed as follows:

Equation 1: Profit margin as a measures of profitability

$$\text{Profit margin} = \text{Net income} / \text{Net sales}$$

Gross margin is computed in accordance to Padachi *et al.* (2008) who uses gross operating profit divided by total assets. Profit margin differs from one industry to another. For instance, an appliance company might require a profit margin between 10% and 15%; whereas a retail supermarket might require a profit margin of 1% or 2%. Profitability analysis is a key sign to know firm's performance (Rezazadeh & Heidarian, 2010). There was need to conduct a study to ascertain the profitability margin of iron and steel manufacturing firms in KIBP.

In another study by Owino (2014) computes profitability using the second measure which is the total asset turnover. Padachi *et al.* (2006) states that ROA is a good measure for firm profitability, because it relates the profitability of a company with its assets. These ratios reflect on management because managers are ultimately responsible for operating efficiency.

Equation 2: operating efficiency as a measures of profitability

$$\text{Return on total assets} = \text{Net income} / \text{Average total assets}$$

Return on assets means how much a firm generates profits and effectiveness with given resources. It is also called return on investment (ROI).

The following equation shows the important relation between profit margin, total asset turnover, and return on total assets.

Equation 3: Relation between profit margin, total asset turnover, and return on total assets

$$\text{Profit margin} \times \text{Total asset turnover} = \text{Return on total assets}$$

$$\text{Or } \frac{\text{Net Income}}{\text{Net Assets}} \times \frac{\text{Net Sales}}{\text{Average total Assets}} = \frac{\text{Net Income}}{\text{Average total Assets}}$$

Both profit margin and total asset turnover contribute to overall operating efficiency, as measured by return on total assets.

Equation 4 :Return on common stockholders' equity

$$\text{Return on common stockholders' equity} = \frac{(\text{Net income} - \text{Preferred dividends})}{\text{Average common stockholders' equity}}$$

Ahsen, Rawalpindi, Islamabad and Hashmi (2011) provide that profit maximization is the ultimate objective of firm as well as protecting liquidity is an important objective too. The difficult of working capital management is to achieve the two objectives optimally within an operating period if profit increases at the cost of liquidity and this may create serious problem to firms. Therefore, to solve such problems, there must be some compromise between these two objectives of firms. One objective will not achieve at the cost of other as both objectives have their own importance to firms. If firms do not care about profitability, they may not survive for a longer period (Ahsen,2011). This study was sought to examine whether iron and steel manufacturing firms in KIBP do not care about liquidity compelling themselves into problem of insolvency or bankruptcy.

2.2 Theoretical Review

Various theories such as Peking order theory, Wreckers theory of capital structure, Trade off theory and distress model explain the link between financial distress and profitability differently. However, this study was grounded on two most appropriate applicable theories that is wrecker's theory and Tradeoff theory as discussed below;

2.2.1 Wrecker's theory

Wrecking is the act of withdrawing funds from already financially distressed firms who contrary badly need those funds. According to Wangige (2016) the authors independently explored the concept that stocks of financially distressed firms consistently underperform than those of financially sound firms. This is normally motivated by the desire among investors to opt out before the firm ultimately fails and they lose their investment (Bas, 2014). The action can also be explained as the process of pre-emptive destruction of a company before its value ultimately plummets to a value beyond salvage (Abuga & Memba, 2013). Investors withdraw resources from the firm as private, non-dividend benefits. Financially distressed firms shareholders will only suffer opportunity cost if the firm recovers, however if it defaults on its obligations, the withdrawal of funds is deemed to be a free source of funds which can be reinvested elsewhere for an acceptable return (Aasen, 2011). An investigation into the stock levels of iron and steel manufacturing firms in KIBP 's security exchange can be of help in ascertaining the fluctuation rate of shares to bring out a clear level of financial distress of in relation to the theory.

2.2.2 Trade off theory

The main goal of a firm is to maximize its value for that reason debt and equity are used as substitutes. Thus the trade-off theory reveals that firms have optimal debt-equity ratios, which they determine by

trading off the benefits of debt with the costs. The primary costs are those associated with financial distress and the personal tax expense bondholders incur when they receive interest income (Erdogan, 2010).

According to this theory, higher profitability decreases the expected costs of distress and lets firms increase their tax benefits by raising leverage. Therefore, firms should prefer debt financing because of the tax benefit. As per this theory firms can borrow up to the point where the tax benefit from an extra dollar in debt is exactly equal to the cost that comes from the increased probability of financial distress (Hu, 2011).

Similarly, Erdogan (2010) also argue that increasing debt results in an increased probability of bankruptcy (financial distress). Hence, the optimal capital structure represents a level of leverage that balances bankruptcy costs and benefits of debt finance. It was not clear as iron and steel manufacturing firms in KIBP experienced high debt or liabilities that propelled their insolvency.

Based on the trade-off theory, financial distress has gained consideration as an important determinant of a firm's optimal capital structure Miller (1977) cited in Lin, (2009). Trade-off theory suggests that a firm can capitalize on advantages from increasing its debt level through tax benefits (interest expense is tax deductible). However, as a firm exceeds the debt level above a certain point, the firm's degree of financial distress begins to increase and costs associated with debt begin to overshadow benefits (Hardiyanto *et al.*, 2014). Therefore, the firm attempts to maintain its capital structure at a balanced and optimal level to avoid the greater costs of debt compared to the benefits of debt. Maina and Sakwa, (2012) extends the Modigliani and Miller (1963) theorem by including the possibility of financial distress costs. Thus, the idea of the trade-off theory is that an optimal capital structure at which the firm maximizes its value and minimizes its cost of capital exists; it can be attained when the benefits and costs of debt exactly offsets (Miller 1977). Xie, Changqing & Xiang (2011) however, argues that bankruptcy costs are too small to affect optimal capital structure; he also argues that taxes are irrelevant to the firms' debt to equity choice. There was need to pursue a study to examine whether iron and steel manufacturing firms in KIBP paid off bankruptcy costs.

Various scholars established diverging results on the effect of accounts payables, accounts receivables and inventory period on profitability as tabulated below;

Table 2. 1: Summary of the Scholarly diverging results on the measures of financial distress

Effect → Variable ↓	Significant negative effect on a firm's profitability	Significant positive effect on a firm's profitability
Accounts Payables Days	Deloof (2003) Laziridis and Tryfonidis (2006) Garcia-Teruel and Martinez-Solano (2007) Karaduman et al. (2011) Sharma and Kumar (2011) Falope and Ajilore (2009) Raheman and Nasr (2007)	Mathuva (2010)
Accounts Receivables Days	Deloof (2003) Laziridis and Tryfonidis (2006) Gill et al. (2010) Garcia-Teruel and Martinez-Solano (2007) Samiloglu and Demirgunes (2008) Karaduman et al. (2011) Falope and Ajilore (2009) Raheman and Nasr (2007) Mathuva (2010)	Sharma and Kumar (2011)
Inventories conversion Days	Deloof (2003) Laziridis and Tryfonidis (2006) Garcia-Teruel and Martinez-Solano (2007) Samiloglu and Demirgunes (2008) Karaduman et al. (2011) Sharma and Kumar (2011) Falope and Ajilore (2009) Raheman and Nasr (2007)	Mathuva (2010)

Sources: Baveld, (2012)

2.3 Accounts Payables Period and profitability of iron and steel manufacturing firms in KIBP

2.3.1 An overview of Accounts Payables Period

Abdullahi, Rahima and Abass (2016) defines accounts payable as the supplier whose payment for goods or services has been processed but who has not yet been paid. Accounts payable includes trade credit and accrued expenses which together provide finance to the operations of a business on an on-going basis. Firms would rather sell for cash than on credit, but competitive pressure forces most companies to offer trade credits. Unlike credit from financial institutions, trade credit does not rely on formal collateral but on trust and reputation (Akinyomi, 2014). The key guiding question was which decision do iron and steel manufacturing firms in KIBP undertake?

Accounts payable includes trade credit and accrued expenses which together provide finance to the operations of a business on an ongoing basis (Moodley, Ward & Mullerm, 2017). Inventory, accounts recoverable and cash management reflect the current assets of the WCM. But account payable represents the current liabilities of the WCM. Credit period of account payable shows how many days are taken to pay their suppliers. If payment period is increased, it may result in loss of good suppliers (Malingu & Rotich, (2017). Therefore, it was not clear as to whether iron and steel firms in KIBP kept better relations with their supplies and try to keep optimal Working capital management.

Account payables (AP) are the opposite of account receivables, instead of giving a credit on a sale, a firm receives a credit. Kimaru, Kubasu and Chepkoech (2016) explain account payables as follows: “When a firm makes a purchase on credit, it incurs an obligation to pay for the goods according to the terms given by the seller. Until the cash is paid for the goods the obligation to pay is recorded in accounts payables. Account payables can be seen as a short term loan, or in other words, a source of funding (Duru, Nwakaego & Okpe, 2015). The study sought to investigate the extent to which iron and steel manufacturing firms in KIBP made use of APP as a source of funding to enhance profitability.

The primary goal for an account payable (AP) is to ensure on-time, accurate payments in compliance with internal controls, tax requirements and other regulations. AP is responsible for paying invoices that have been validated, approved and coded for proper (timely) recording. Ikechukwu and Nwakaego (2015) state that delaying payment of accounts payable to suppliers allows firms to access the quality of bough products and can be inexpensive and flexible source of financing. On the other

hand, delaying of such payables can be expensive if a firm is offered a discount for the early payment. The measurable way of measuring AP is by payable period (APP) which compares creditors with the total credit purchases. It signifies the credit period enjoyed by the firm in paying creditors. Accounts payable include both sundry creditors and bills payable. The longer the period the more advantageous for the firm as such fund can be put to other uses. However, longer accounts holding period can erode a firm's credit worthiness (Onyeka, Nnado & Iroegbu, 2018). The study pursued to assess the level at which credibility of iron and steel firms in KIBP was worthwhile.

Accounts payable are generated when a company purchases some products for which payment has to be made no later than a specified date in the future (Nwakaego & Ikechukwu, 2016). An accounts payable day is a time between the purchase of goods and its payment. If the firm is unable to pay its accounts payable on time then it signals to the market that firms have some financial problem and it might go bankrupt resultantly its goodwill will be spoiled and the value of its shares will go down (Moodley, Ward & Mullerm, 2017). Therefore, it is necessary for the firm to manage the day's accounts payable in a way that it does not create any trouble for it. Shorter duration of day's accounts payable can be beneficial for an organization as it has some discount associated with it but at the same time, it will force a company to reduce the collection period, which might cause the reduction of sale and profit margin as well. Therefore, companies have to be very careful while deciding on the duration of day's accounts payable (Seyoum, Tesfay & Kassahun, 2016). It was not clear as to whether APP of iron and steel firms in KIBP followed any credit policy and the level to which they were standardized.

Wobshet, Arega and Million (2014) described that account payable is the cheapest and simplest way of financing an organization. Accounts payable are generated when a company purchases some products for which payment has to be made no later than a specified date in the future. Accounts payable are a part of all the businesses and have some advantages associated with it for instance, it is available to all the companies regardless of the size of the company and earlier payment can bring cash discount with it. Companies not only need to manage their account payables in a good way but they should also have the ability to generate enough cash to pay the mature account payables (Wobshet, Arega & Million, 2014). The study needed to investigate how APP of iron and steel firms were managed to realise profits.

Addae, Nyarko-Baasi and Hughes (2013) reveal that companies should try prolonging the time of payment as long as possible so as they can use the advantage of their suppliers financing their investments until payment has been made. Another argument for prolonging the time for payment is that the producing companies, for example, need some time to convert their purchased raw materials into products they can get sold and get cash in return (Baveld, 2012). Some suppliers offer their customers discount rates as an attempt to get them to pay their receivables before maturity date, which may sound tempting, but this is not always the most profitable option (Owino, 2014). If there is no discount offer given companies should use the whole credit period and pay their payables on due date. Nevertheless, paying after due date can be always avoided unless the company has fallen in financial difficulties and there is no other choice (Moodley, Ward & Muller, 2017). The guiding question to the study is; were iron and steel manufacturing firms in KIBP so distressed to pay creditors after due date.

2.3.2 The Effect of Accounts Payable Days on Profitability

The first research question this study tends to redress is whether accounts payables increase profitability. Many reasons compel suppliers to extend credit. Primarily, granting trade credit enhances firm's sales, and consequently may result in higher profitability. Researcher studies by Addae, Nyarko-Baasi and Hughes (2013) point out to a negative effect of accounts receivable on firm profitability. Contradicting evidence is found by Charitou, Elfani and Lois, (2010) who find a positive effect of ROA on accounts receivable. The following researchers give us empirical evidence on effect of accounts payable days on firms profitability and these are as follows;

Longer accounts payable days are preferable theoretically delaying payment of accounts payable to suppliers allows firms to access the quality of bought products and can be inexpensive and flexible source of financing to boost profitability (Malingu & Rotich, 2016). On the other hand, delaying of such payables can be expensive if a firm is offered a discount for the early payment or is being charged for late payment (Jayarathne, 2014). The study investigated whether iron and steel manufacturing firms experienced high levels of financial distress that hindered early or prompt pay to creditors.

Similar to the above, Awad and Al-Ewesat, (2012) studied the firm's efficiency in working capital management in the cement industry where they analysed the relationship between working capital management efficiency and EBIT. Using regression analysis it was found that there is a positive relation between payable period and EBIT, which means profitable firms delay their payables. In Kajanathan and Nimalthasan (2013), he investigates how public companies listed at the regulated

market in the republic of Serbia manage their accounts receivable during recession times. A sample of 108 firms is used. The accounts receivables policies are examined in the crisis period of 2008-2011. The short-term effects are tested and the study shows that between accounts receivables and two dependent variables on profitability, return on total asset and operating profit margin, there is a positive but no significant effect. This suggests that the effect of receivables on firm's profitability is changing times of crisis.

In congruence to the above finding, a study by Falope and Ajilore (2009) in Tanzania utilized panel data econometrics in a pooled regression, where time-series and cross-sectional observations were combined and estimated. They found a significant negative effect on net operating profitability and average payment period for firms Tanzania listed on Dar es Salaam Stock Exchange. As the firm's corporate profitability can only be increased by reducing payment period.

Similarly, Srinivas and Kibona (2013) conducted a study on the effects of working capital management on the profitability using a sample of 8,872 small and medium-sized enterprises (SMEs) from Tanzania covering the period 2008 -2011. They found that managers can create value by reducing their number of days for which their outstanding accounts as this will improve the firm's profitability.

In the same vein, empirical results provide mixed results as Ikechukwu (2015) claim that profitable firms delay their payables period. This means that they have longer duration of days accounts payable as confirmed by Friend & Lang (2013). However, this contravenes the study by Akinbola (2012) who found that managers can only increase profit by reducing numbers of accounts payable as firms benefit discount for the early payment and avoid being charged for late payment.

Additionally, Mwangi, Makau and Kosimbei (2014) examined the effects of working capital management on profitability of 8,872 Small and Medium Enterprises (SMEs) in Spain for the period from 1996 to 2002. Using Return On Assets (ROA) as used as a measure of profitability and the number of days accounts receivable, number of days inventories, number of days accounts payable and cash conversion cycle are used to measure working capital management. The correlation matrixes demonstrate that the return on assets has the significant effect with number of day's accounts payable.

The study of Chebii, Kipchumba and Wasike (2011) indicated a negative effect on average number of day's accounts payable and profitability which indicates that accounts payable policy has an effect on profitability as a company with less profit takes longer payment period. In the case for Belgian companies, suppliers offer their customers substantial discount for the cash payment customer which lead to increasing profit of the company (Pouraghajan, 2012).

In the study by Duyen (2012) results showed that an increase in accounts payable period over the 15 year time period, contrary to expectation of large companies which extend their payment period to suppliers from 45 to 60 days or 60 to 90 days increased working capital as well as profitability. The explanations are that only few companies succeeded in increasing their payment terms, increasing in amount of accounts payable to increase fund for working capital Divergent to Nuru (2011) who found out that there exists a negative relationship between accounts payable period and profitability measures. However, except for operating profit margin this effect is not statistically significant. Therefore, more number of day's accounts payable is considered better for shorter cash conversion period (Lantz, 2008). This led to the hypothesis stated as follows:

H₀: Accounts payable periods has significant effect on the financial performance of firms.

In support of the above finding, Lazaridis and Tryfonidis (2006) explain significant positive effect on gross operating profit as a measure of profitability and number of day's accounts payable. The researcher elucidates this positive significant result as a company delays its payment which affects the higher level of working capital and use to increase its profitability which less-profit companies would make use of this to delay their payment.

Analogous studies by Ebaid (2009), Nimalathasan, (2010) and Pouraghajan, (2012) found weak-to-no influence, debt was positively and strongly associated with financial performance and significant negative effect on debt ratio and financial performance, respectively, as measured by profitability. Another comparable study by Iorpev and Kwanum, (2012) revealed a negative and insignificant effect on accounts payables, ROA and profit margin.

Munene (2011) examined the effect of working capital management on the Financial Performance of Companies Listed at the Nairobi Securities Exchange and found that poor working capital management had negative effects on ROA while proper liquidity and leverage management had positive effects on

profitability. The study concluded that accounts payable did not influence the financial performance of listed firms as sustained by Akinbola, (2012).

A similar examination by Salam, (2013) and Malm & Rosland, (2013), in Bangladesh on the Firms' Performance and found an insignificant effect between accounts payable and firm performance. Several researchers have tested the effects of profitability on firm leverage. Kester, Nishanthini & Nimalathan, (2013) concluded that there was a significant effect on profitability and debt/asset ratios. Nzioki, Kimeli, Abudho and Nthiwa (2013) found a significant negative effect between profitability and debt/asset ratios.

A similar study by Duyen (2012) found that short-term debt presents a negative impact on profitability measured by net margin. Hill *et al.* (2010) find that the profitability of receivables is a decreasing function of market share. However, market pressures might force small business with no market power to offer normal industry credit terms, regardless of its possible negative effect on profitability. The study was conducted to ascertain the effect of trade credit on profitability for iron and steel firms in KIBP.

Lazaridis and Tryfonidis (2006) selected 131 companies listed in the Athens Stock Exchange for the period covering 2001-2004. They studied the effect of cash conversion cycle and payable days on profitability of the companies and observed that cash conversion cycle and payable days are negatively related. Garcia *et al.* (2007) used 8872 Spanish firms for the period covering 1996-2002 to study the effect of working capital components on profitability. They concluded that profitable firms take less time to collect their receivable, pay their dues early and convert the inventories into finished goods within a short period.

Falope and Ajilore (2009) in their study of the same, found a significant negative effect between the working capital components and net operating profitability for a sample of 50 Nigerian firms. Sebastian Ofumbia (2012) selected Nigerian firms to identify the impact of working capital components on profitability. They identified that cash conversion cycle affects profitability is significant compared to other variables.

Similar studies on capital and firm performance were by: Mwnagi, Makau, and Kosimbei, (2014), who found that financial leverage had a statistically significant negative effect on financial performance as measured by return on assets (ROA) and return on equity (ROE); Siro, (2011), whose findings revealed that there was an inverse effect between capital structure and financial performance of listed firms. Leonard, (2014), found that debt and equity were major determinants of financial performance of firms listed at the NSE and there was evidence of a negative and significant effect of capital structure on all measures of performance, implying that the more debt the firms used as a source of finance they experienced low performance and firms listed at NSE used more short-term debts than long-term debts.

Pratheepkanth (2011) study found a weak positive effect between gross profit and capital structure and the net profit negatively capital structure. ROI and ROA also negatively affected capital structure at -0.104, -0.196 respectively. Kajirwa, (2015), examination revealed that debt negatively affects firm performance of NSE Commercial Banks, though not statistically significant as measured by ROA. Kajanathan and Nimalthasan (2013) examination indicated that gross profit, net profit, return on equity, return on assets, had no significant effect on debt equity ratio and Gross profit margin and Return on equity significantly affected debt assets ratio as the measures of capital structure and capital structure had significant effect on gross profit and return on equity.

Different results of literature can be found in different economic environment. Dong and Su (2010) had an attempt to study the relationship between profitability and cash conversion cycle in listed firms in Vietnam stock market. Findings of the study by Ebaid (2009) showed that profitability strongly negatively affected CCC. This indicates that the CCC increases, it will effect to decrease the Profitability of the firm.

Quainoo (2011) study investigated the effect of loans on SMEs (in Ghana) and found that term loans were the most patronized type of bank loans due their repayment structure which were structured in line with the business cash flows. Most SMEs used loans as working capital mainly to source raw materials for production; that bank loans for SMEs were mostly used improve their performance and that there was a major disadvantage of accessing a bank business loan because of the high cost of capital (usually high interest rate) charged mostly on SMEs. Charitou, Elfani & Lois, (2010) performed a study on the effect of working capital management on firm's financial performance and found that the cash conversion cycle and all its major components; namely, days in inventory, days'

sales outstanding and accounts payable payment period were associated with the firm's profitability and that working capital management led to improved profitability.

In a nutshell, the aforementioned literature suggests that different debt sources provide different features that may have either good or bad effects on firms' profitability. While existing theories and models suggest that firms value is affected by the particular composition of debt sources. not much research has been carried out on the effect of accounts payable on profitability among others. However, there are a few studies with reference to east African countries on working capital management and firm profitability, especially in the manufacturing and construction sectors. For example, Mathuva (2010), in his study in Kenya, concluded that payable days and inventory days are positively related with the profitability whilst receivable days negatively affected profitability. Nyabwanga, Ojera, Lumumba, Oondo and Otieno (2012) assessed the effect of working capital management practices on the financial performance of SSEs in Kisii South District, Kenya. A sample of 113 SSEs comprising 72 trading and 41 manufacturing enterprises was used. Pearson's correlation coefficients and multiple regression analysis techniques were used to analyze data.

Consequently, the findings of the study were that, working capital management practices were low amongst SSEs as majority had not adopted formal working capital management routines and their financial performance was on a low average. Gakure, Cheluget, Onyango and Keraro (2012) analyzed the effect of working capital management on performance of 15 manufacturing firms listed at the Nairobi NSE, Kenya, from 2006 to 2010 and for a total 75 firms year observations. They used secondary data from a sample of 18 companies at the NSE. A regression model was used to establish the relationship between the dependent variable and the independent variables. Gakure, *et al.* (2012). The study found that accounts collection period, average payment period, inventory holding period negatively affected profitability while the cash conversion cycle positively affected profitability. However, the effects of the independent variables, except the average payment period were no statistically significant though the overall model was statistically significant. This study will address this gap and also add literature in capital structure theory by examining the effect of individual of components accounts payable financing mode and profitability of iron and steel manufacturing firms listed at Uganda iron and steel manufacturing association and found in KIBP (Khawaja, Niaz, Falahuddin & Ghulam, 2013).

2.4 Accounts Receivables period and profitability of manufacturing firms

In the literature of working capital, research findings it is indicated that, accounts receivable period is related with profitability of firms both positively and negatively, (Falope and Ajilore, 2009; Lazaridis and Tryfonidis, 2006; Nobanee, 2009; Marc Deloof 2003; Raheman and Nasr, 2007). The empirical result shows a significant negatively relation between the ROA and ARP. The results are consistent with the findings from previous studies conducted by (Lazaridis and Tryfonidis, Deloof 2003, Raheman and Nasr, 2007) that provides the evidence of the negative relation between ROA and ARP.

2.4.1 Concept of Accounts Receivables

All the businesses have either products or services to sell to the customers, they also want to maximize their sales so, in order to increase the level of their sales they use different policies to attract customers and one of them is offering a trade credit. It means a company sells its product now to receive the payment at specific date in the future and this is when accounts receivable arise (Mutungi, 2010).

Business enterprises today use trade credit as a prominent strategy in the area of marketing and financial management. Thus, trade credit is necessary in the growth of the businesses. When a firm sells its products or services and does not receive cash for it, the firm is said to have granted trade credit to its customers. Trade credit thus creates accounts receivables which the firm is expected to collect in future (Budambula, 2014).

Raymond, Ezejiofor, Adigwe and John-Akamelu (2015) found that one sixth of total assets for manufacturing corporations consist of accounts receivable and because of its huge proportion in the total assets, it can become a problem for the organization in a way that it requires more financing for the period for which payment is due from the customers. Accounts receivable also have opportunity cost associated with them because company cannot invest this money elsewhere until and unless it collects its receivables. More accounts receivable can raise the profit by increasing the sale but it is also possible that because of high opportunity cost of invested money in accounts receivable and bad debts the effect of this change might turn difficult to realize. On the other hand if a company adopts a policy to have a low level of accounts receivable then it can reduce the profitability by reducing the sales but it can contribute to the profit by reducing the risk of bad debts and by reducing investment in the receivable (Abuzayed, 2012).

Accounts receivables are executed by generating an invoice which is delivered to the customer, who in turn must pay within and with the agreed terms (Mohamad & Saad, 2010). The accounts receivables are one of the largest assets of a business enterprise comprising approximately 15% to 20% of the total assets of a typical manufacturing firm (Azam & Haider, 2011). Investment in receivables takes a big chunk of organization's assets. These assets are highly vulnerable to bad debts and losses. It is therefore necessary to manage accounts receivables appropriately. Managing accounts receivables is important for any firm because it is directly linked to the sales. Bagchi & Khamrui (2012) defined the term receivables as the number of days from the moment of sale (issuing of invoice) until receiving of the payment. Credit sales create account receivable allowing a reasonable credit period for their customers. Credit sales increase the sales volume of the company. However, this may lead to increase the bad debts (Naser, Nuseibeh & Al-Hadeya, 2013). Therefore, this study was essential in determining how iron and steel manufacturing firms in KIBP implement a collection policy to increased average collection period to reflect good collection efforts or delay customer payments attracting financial distress as well as profitability challenges.

2.4.2 Effect of Accounts Receivables period on profitability

Theoretically, accounts receivable days may lead either to an increase or to decrease of the firms' profitability, and which period of collection is preferable, having long accounts receivable days or short accounts receivable days? This question will be answered by empirical results of various researchers as follows:

Trade credit is very important to a firm because it helps to protect its sales from being eroded by competitors and also attracts potential customers to buy at favorable terms. As long as there is competition in the industry, selling on credit becomes inevitable. A business will lose its customers to competitors if it does not extend credit to them. Thus, investment in accounts receivables may not be a matter of choice but a matter of survival (Nimalathasan, 2010). Given that investment in receivables has both benefits and costs; it becomes important to have such a level of investment in receivables at the same time observing the twin objectives of liquidity and profitability.

To remain profitable, businesses must ensure proper management of their receivables. The management of receivables is a practical problem, businesses can find their liquidity under considerable strain if the levels of their accounts receivables are not properly regulated (Nireesh, 2012). Thus

management of accounts receivables is significant, for without it; receivables will build up to excessive levels leading to declining cash flows. Poor management of receivables will definitely result into bad debts which lowers the business profitability.

In the same vein Addae, Nyarko-Baasi and Hughes (2013) liquidity problem is not left out when granting credit sales. This arises from over investment in receivables especially when the debtors are of high risk class. A company suffering from liquidity problem implies that the cost of obtaining funds from other sources may be high and a credit sale beyond the optimal level of credit is dangerous. On the other hand, sales level and profitability are reduced as a result of high or tight credit policy or not granting credit at all (Ebaid, 2009).

The time between the sale and the receipt of payment is known as trade credit period or accounts receivable days. It is believed that longer period of collection of accounts receivable or longer credit period offered by the company results into higher sales, and more sales bring more profit in the business (Ebaid, 2009). Therefore, there could be an existing significant effect of number of day's accounts receivable on profitability of the firm. On the other hand large time span between the sale and receipt of accounts receivable result in decline of cash flows and may result in bad debts, which in turn may reduce the profit of the firm (Ebaid, 2009).

To test the effect of working capital management on corporate profitability, Iorpev, & Kwanum, (2012) used a sample of 1,009 large Belgian nonfinancial firms for a period of 1992-1996. By using regression tests, he found significant effect of gross operating income and the number of day's accounts receivable of Belgian firms. Based on the study results, he suggests that managers can increase corporate profitability by reducing the number of day's accounts receivable.

Other researchers Malm and Rosland (2013) who studied the effect of working capital management on corporate profitability of Japanese firms analyzed a sample of 2,123 Tanzania non-financial companies listed in the Dar es salaam Stock Exchange for the period 1990-2004 and they concluded that company managers can increase profitability by shortening the receivables collection period. On the other hand Kajirwa (2015) studied the firm's efficiency in working capital management in the paper industry in India. They analyzed the effect of working capital management efficiency on Earnings before interest

and taxes (EBIT). Using regression analysis it was found that collection period had a significant effect on EBIT. This means credit facility increases sales of firm, which ultimately increases profitability.

The study results of Pratheepkanth (2011), Malingu and Rotich (2016) are the same as they suggest that managers can only increase corporate profitability by reducing the number of days accounts receivable however their results contradict with Dinh, Hinh and Clarke (2012) as they found that corporate profitability can only be increased by increasing accounts receivable days. The mixed results may be due to different period and selection of companies of their researches.

The study on the effect of receivables management on working capital and profitability by Venkata *et al.* (2013) among selected cement companies in Indian from 2001 -2010 comparing the ratios with the efficiency of receivables management viz, receivables to current assets ratio receivable to total assets ratio, receivable to turnover ratio, average collection period, working capital ratio profitability ratio completed using ANOVA statistical tool to know the impact of working capital and profitability of the selected cement companies. The investigation reveals that the receivable management across cement industry is efficient and showing significant effect on working capital and profitability (Venkata, Ramakrishnaiah & Chengalrayulu, 2013).

Michalski (2007) in his study, observed that an increase in the level of accounts receivables in a firm increases both the net working capital and the costs of holding and managing accounts receivables and both lead to a decrease in the value of the firm. A study by Appuhami (2008) found out that firms which pursue increase in their accounts receivables to an optimal level increase their profitability resulting from increased sales and market share.

A study by Amargit, Nahum and Neil (2010) emphasized that firms can create value by reducing their number of days of accounts receivable, thus confirmed the finding of Kwame (2007) who established that the length of receivables collection period has a negative effect on a firm's performance. A study by Arunkumar and Radha (2013) also affirmed that, putting in place a sound credit policy ensures proper debt collection procedures and is pivotal in improving efficiency in receivables management hence the performance of firms.

Mohamad and Saad (2010) find the negative effect on number of day's accounts receivables and profitability measured by gross operating profit. This negative result demonstrated that companies can increase their profitability by decreasing credit term giving to their customers. Amargit *et al.* (2010)) find the significant negative effect between the average number of days accounts receivable and gross operating income as a measure of profitability. Nimalathan (2010) provide the evidence that companies have focused on improving the management of accounts receivable as their accounts receivable turnover increase over the 15 year time period for 1990-2004 (Addae, *et al.*, 2013).

Ebaid (2009) conduct the study to examine the effect of working capital management on company profitability of listed manufacturing companies in Istanbul Stock Exchange for the period from 1998 to 2007. Cash conversion cycle, accounts receivable period and inventory period are used to measure the effects of working capital management; return on assets is used as a profitability measure. Results from regression analysis show that profitability has a significant negative effect with accounts receivable period.

Malm and Rosland (2013) examine effects of working capital management on profitability of 8,872 small and medium enterprises (SMEs) in Spain for the period from 1996 to 2002. The return on assets (ROA) is used as a measure of profitability, and the number of days accounts receivable, number of days inventories, number of days accounts payable and cash conversion cycle are used to measure working capital management. The regression results demonstrate that the return on assets has the significant with the number of day's accounts receivable.

Malingu and Rotich (2016)) the results report that profitability has significant effect with accounts receivable as a measure of liquidity. Furthermore, there is a positive significant effect between average collection period and profitability found by Venkata *et al.* (2013). Also Venkata, *et.al* (2013) findings of the study show that accounts receivables period affects firm profitability negatively. Base on the prior studies and discussion, a hypothesis is proposed as follows:

H₀: The way how receivables are managed has significant effect on the financial profitability of manufacturing firms.

2.5 Inventory Period and Profitability of Manufacturing Firms

2.5.1 Inventory Overview

In recent years across the global economy, Inventory Management has attracted a great deal of attention from people both in academia and industries. A lot of resources have been dedicated into research in the inventory management practices of organizations. It represents one of the most important assets that most businesses possess, because the turnover of inventory represents one of the primary sources of revenue generation and subsequent earnings for the company.

Generally, inventories are the second largest asset in a manufacturing firm. There are three types of inventories, i.e., raw materials, work-in process, and finished goods. Inventory may lead to several costs like storage cost, insurance and obsolescence cost. Further, if a firm does not maintain a proper investment level in inventories, a disruption of the production and decrease in the sales can occur. Kwadwo (2015) defined the inventory conversion period as the time taken to convert inventory held in the firm into sales. If inventory conversion period increases, cost of inventory tends to increase. Therefore, the purpose of inventory management is to minimize these costs without causing disruption in the production (Okoh, Mgbonyebi & Umeadi, 2008).

Inventories comprise raw material, finished goods and work in process. It is not necessary for a firm to hold high level of raw materials inventory, in fact, a firm can order raw material on the daily basis but the high ordering cost is associated with such a policy. Moreover, the delay in supply might stop the production (Sitienei & Memba, 2015). Similarly, firm can reduce its finished goods inventory by reducing the production and by producing the goods only to meet the current demand but such a strategy can also create trouble for the company if the demand for the product rises suddenly. Such a situation might cause the customer dissatisfaction and even a loyal customer can switch to the competitors brand. Therefore, the firm should have enough inventories to meet the unexpected rise in demand but the cost of holding this inventory should not exceed its benefit (Koumanakos, 2008).

In the manufacturing companies, nearly 60% to 70% of the total funds employed are tied up in current assets, of which inventory is the most significant component. Thus, it should be managed in order to avail the inventories at right time in right quantity. Inventory can be also viewed as an idle resource which has an economic value. So, better management of the inventories would release capital productively (Abdulraheem, Yahaya, Isiaka & Aliu, 2011).

Mittal, Mittal, Gagandeep and Gupta (2014) observed that inventories days can be defined as the time between the receipt of raw material and delivery of finished goods. The effect of inventories days on profitability depends on the policy which a company adopts towards working capital. A company with aggressive working capital policy holds minimal inventory and has few days for which they held inventory. This policy tends to enhance the profitability of the firm, as carrying costs associated with inventory tends to be low (Ogbo, Onekanma & Ukpere, 2014). While a company with defensive, policy has higher level of inventory and has longer inventories days. Hence, this policy might reduce the profitability because of the funds tied up in inventory and due to higher carrying costs associated with higher level of inventory (Akoto, Awunyo & Angmor, 2013).

Inventory control implies the coordination of materials, controlling, utilization and purchasing. It has also the purpose of getting the right inventory at the right place in the right time with right quantity because it is directly connected with the production. The objective of any organization is to get a good return out of every credit invested in the company (Muhammadi *et al.*, 2018).

According to Oz and Yelkenci (2015) management through their policies, coordination, decision and control mechanisms must maximize the return on investment (ROI). By deciding inventory norms nationally and through control systems, Inventory turnover can be maximized which in turn will maximize current assets turnover and ROI, by: proper planning and control of spare parts, capacity utilization can be increased which will increase the turnover of fixed assets and consequently increase ROI; developing dependable sources and purchasing quantity materials at competitive prices; Materials cost per naira of sales can be brought down which will increase the profit margin; developing proper systems and control on issue of materials, the consumption can be minimized, reduction in wastes and rejects, resulting in reducing the materials cost, which will increase the profit margin establishment of farms to grow the major raw materials and less dependent on importation (Panigrahi, 2013).

In a study by Vintila and Nenu (2016) Companies need to keep inventory at a level, which maximizes the profit, and this level is known as optimal level. There are costs associated with inventory i.e. carrying cost and ordering cost. Carrying cost involves all the expenses, which firm has to bear for on handling inventory and this involve insurance, warehouse expenses, security expenses etc. Ordering cost is a cost that is associated with one order. It includes telephone expenses, management time, and

clerical expenses (Tesfamariam, 2014). Ordering cost is a fixed cost and its effect can be reduced by ordering a big lot but big lot will increase the carrying cost. On the other hand, if a finance manager saves the carrying cost by ordering twice or thrice rather than one big lot then ordering cost will increase. In both cases, profitability is directly affected. Therefore, in order to find an optimal level managers have to find a balance between cost and benefit associated with different inventory levels (Umar, Nazir & Nawaz, 2012). In order to maintain inventory levels of such magnitude, huge financial resources are committed to them (Mittal, 2014). As such, inventory also constitutes a major component of working capital. To a large extent, the success or failure of a business depends upon its inventory management performances. Inventory management, therefore, should strike a balance between too much inventory and too little inventory (Gupta & Gupta, 2012).

Therefore, the focus of this study was achieving profitability through effective management of inventory period with emphasis on procurement, receipt of materials, holding and ordering costs, inventory control, and foreign currency for import.

2.5.2 Effect of Inventory Period on Profitability of Manufacturing Firms

In theory the policy of the company will determine the inventory conversion period and this will have an effect on profitability accordingly. The study results of the different researchers on the effect of inventories days on firms' profitability are as follow; Mathuva (2010) examined the influence of working capital management components on corporate profitability by using a sample of 30 firms listed on Dar es Salaam Stock Exchange (DSE) for the periods 2008 to 2011. He used the pooled ordinary least square (OLS) and the fixed effects regression models to conduct data analysis.

According to Anichebe and Agu, (2013). An economic evaluation of a firm's performance to provides financiers an inspiration of how lengthy it gets a business to revolve its stock into sales. Usually, the lesser the number of days the good for firm. However, it is essential to keep in mind that the average inventory is change according to firm to firm and industry to industry. The key findings of his study that the period taken to convert inventories into sales (the inventory conversion period) has a highly significant positive effect with profitability. The research conducted by Eneje, Nweze and Udeh, (2012) who studied 131 companies listed on Dar es Salaam Stock Exchange for 2008 to 2011 to investigate the effect of profitability and managing working capital. By using regression analysis it was found that

profitability had a significant positive effect on components of working capital. They also found out that inventory days has a significant positive effect on profit margins.

On the other hand Samiloglu and Demirgunes (2008) conducted the study to examine the effect of working capital management on company profitability of listed manufacturing companies in Dar es Salaam Stock Exchange for the period from 2008 to 2011 inventory period used to measure the effect of working capital management, return on assets is used as a profitability measure. Results from regression analysis show that profitability has a significant effect with inventory period.

Mathuva (2010) suggested that there profitability and inventory conversion period as managers can increase corporate profitability by having longer inventory conversion period. However, Chatterjee (2010) their results show that inventory period affects profitability and so managers can increase corporate profitability by reducing the number of inventories period. This is obvious that companies used for their studies had different inventories policies.

The results by Kimeli (2010) finds that the number of day's inventories affects gross operating profit but it is not in significant level. Koliass, Dimelis and Filios, (2010) conduct the study to examine the effect of working capital management. Cash conversion cycle, accounts receivable period and inventory period are used to measure the effects of working capital management; return on assets is used as a profitability measure. Results from regression analysis show that inventory period has a significant effect on the profitability.

Şekeroglu and Altan (2012) found out that number of day's inventories affects gross operating income. This explains that an increase of the inventories is an affect from a decrease in sales which leads to lower profit for the companies. Another research by Soni (2012) found an increase of inventory turnover over a period of fifteen years that indicates that companies have improved their inventory management. To manage inventory, there are several manufacturing operating managements to apply, such as; just-in-time procedures, make-to-order procedures, lean manufacturing initiatives to improve their operating processes, quality programs to reduce number of parts and supplier rationalization to reduce number of suppliers (Şekeroglu & Altan, 2014). Chalotra (2013) findings of the study show that inventory period affects firm profitability negatively.

Kimeli (2010) investigated the effect of inventory management policies on financial performance of a firm. The purpose of the study was to assess the impact of inventory management practices on financial performance. He found no evidence that smaller relative levels are associated with financial performance as measured by return on assets. Kolias, Dimelis and Filios (2010) examined inventory management and role it plays in improving customer satisfaction. He found that satisfying customers satisfaction, improving supplier partnerships through education and training of employees, and technology promotes high profitability.

In Greece, Koumanakos (2008) studied the effect of inventory management on firm performance in manufacturing firms operating in three industrial sectors in Greece, food textiles and chemicals were used in the study covering 2000 – 2002 period. The hypothesis that lean inventory management leads to an improvement in a firm's financial performance was tested. The findings suggest that the higher the level of inventories preserved (departing from lean operations) by a firm, the lower the rate of return (Abdulraheem, 2008). In conclusion, most of the studies reviewed concentrated on conventional firm level variables such as inventory levels, demand and lead time. Chandraju, Raviprasad and ChidanKumar (2012) carried out a research on the association of inventory control in enhancing business growth in Nigeria a survey of five selected manufacturing companies in port Harcourt metropolis. They made use of simple percentage and chi-square. The analysis revealed that inventory control promotes business growth.

Mittal *et al.* (2014)) the return on assets (ROA) is used as a measure of profitability, and the number of days accounts receivable, number of days inventories, number of days accounts payable and cash conversion cycle are used to measure working capital management. The regression results demonstrated that the return on assets are greatly influenced by number of day's inventory (Ogbo, *et al.* 2014). With the advantage from inventories, companies tend to perform better in managing their working capital and have the shorter inventory conversion period. Hypothesis is formulated as follows:
H₀: Inventory management (holding periods) have significant effect on firms' financial performance.

The efficient management and effective control of inventories help in achieving better operational results and reducing investment in working capital. It has a significant influence on the profitability of a concern thus inventory management should be a part of the overall strategic business plan in every organization (Akoto *et al.*, 2013).

Ogbadu (2009) reveals that efficient and effective management of inventories also ensures business survival and maximization of profit which is the cardinal aim of every firm. More so, an efficient management of working capital through proper and timely inventory management ensures a balance between profitability and liquidity trade-offs (Aminu, 2012). Specific performance indicators have been proved to depend on the level of inventory management practices (Lwiki *et al.*, 2013).

Inventory management is recognized as a vital tool in improving asset productivity and inventory turns, targeting customers and positioning products in diverse markets, enhancing intra and inter-organizational networks, enriching technological capabilities to produce quality products thereby imparting effectiveness in inter-firm collaboration. Proper inventory management even results in enhancing competitive ability and market share of small manufacturing units (Chalotra, 2013).

Well managed inventories can give companies a competitive advantage and result in superior financial performance (Isaksson & Seifert, 2013). Management of inventory is also fundamental to the success and growth of organization as the entire profitability of an organization is tied to the volume of products sold which has a direct effect on the quality of the products (Anichebe & Agu, 2013). Using a survey conducted on all the eight sugar manufacturing firms in Kenya established that there is generally significant effect of inventory management practices on profitability (Lwiki *et al.*, 2013). Specific performance indicators were proved to depend on the level of inventory management practices. They established that Return on Equity had a strong effect on lean inventory system and strategic supplier partnerships. As such, they concluded that the performance of sugar firms could therefore be stated as being a function of their inventory management practices.

Capkun, Hameri and Weiss (2009) studied the effect of inventory on financial performance of manufacturing companies. The researchers studied 52,254 businesses for a period of 25 years between 1980 and 2005; they used multiple regressions to determine the effect of financial performance and various inventory levels. They measured financial performance using gross profits and operating profit results and Inventory levels in regard to raw materials, partially manufactured products, and finished products. The results revealed a positive significant effect between company's inventory management and its financial performance. They also noted that degrees of significance varies depending on the type of inventory and the financial performance.

Sahari, Tinggi and Kadri (2012) empirically analyzed the effect of inventory management on firm's performance along with capital intensity. For the purpose they took a sample of 82 construction firms in Malaysia for the period 2006–2010. Using the regression analysis methods, they deduced that inventory management significantly affected firm's financial performance. In addition, the results indicate that inventory management influences capital intensity but not necessarily for steel iron and steel manufacturing firms in KIBP, which called for the study.

Eneje *et al.* (2012) investigated the effect of raw materials inventory management on the profitability of brewery firms in Nigeria using a cross sectional data from 1989 to 2008 which was gathered for the analysis from the annual reports of the sampled brewery firms. Measures of profitability were examined and related to proxies for raw materials inventory management by brewers. The Ordinary Least Squares (OLS) stated in the form of a multiple regression model was applied in the analysis. The study revealed that the local variable raw materials inventory management designed to capture the effect of efficient management of raw material inventory by a company on its profitability is significantly strong and positive influence on the profitability of the brewery firms. They concluded that efficient management of raw material inventory is a major factor to be contained with by Nigerian brewers in enhancing or boosting their profitability.

Anichebe and Agu (2013) examined the effect of inventory management on organizational effectiveness in selected organizations in Enugu Nigeria. Using a descriptive research and a sample size of two hundred and forty eight (248) respondents, they established that good inventory management influences organizational effectiveness. Inventory management was found to have a significant effect on organizational productivity. They concluded that Inventory Management is very vital to the success and growth of organizations. The entire profitability of an organization is tied to the volume of products sold which has a direct effect on the quality of the product (Kwadwo, 2015).

Little attempt was made to capture the perceptions of managers about the effect of inventory management practices on firm financial performance. Agus and Noor (2006) did measure the perception of managers about the effect of inventory management practices on financial performance of manufacturing firms in Malaysia. Eneje, Nweze and Udeh (2012) did measure effect of efficient inventory management on profitability of breweries in Nigeria. However, circumstances in Nigeria and

Malaysia could be different. This study sought to investigate the effect of inventory management practices on financial performance of iron and steel manufacturing firms in KIBP in Uganda.

2.6 Literature Summary and Gaps

The review of extant literature reveals a large number of studies examining frustrations in working capital management also known as financial distress measured by accounts payables, accounts receivables and inventory days affect profitability in different countries, both Africa and developed countries. Onyeka et al (2018), Moodley (2017), Malingu (2016), Ikechukwu (2015), Mwangi et al,(2014), Nyarko-Basi et al. (2013), Award (2012), Ching *et al*, (2011) found that working capital management has a significant effect on profitability. From the above studies it is evident that the majority of the researchers found similar results. Some scholars found insignificant effect between the trade payables and profitability meaning that profitable firms take less time to collect trade receivable. Likewise, inventories had insignificant effect on profitability where profitable firms convert inventory in to finished goods within a short period. Although these studies have been carried out, there was still ambiguity on the appropriate variables that might serve as proxies for financial distress levels. Further examination on these studies reveals that there was very little empirical evidence on the effect of financial distress on firms' profitability. In Uganda which is the focus country, there were scanty studies done in this area with conflicting results. Studies are not in consistent with this study based on this; this study deemed it necessary to fill this gap. Therefore, this study attempted to address the existing gap between financial distress and profitability among iron and steel firms in KIBP.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The previous chapter opened a way to identify the theoretical and literary works of scholars in relation to financial distress and profitability. This chapter however proceeds a step further by illustrating the ways in which the relevant data and its collection methods helped to obtain data for a period of Five years (2014–2018) about financial distress and its effect on steel manufacturing companies. This discussion covers a breakdown of the various essential research methods and strategies that were implemented in conducting the research. This methodology that was used in the study entails: the Research design, study population, sample size and selection, sampling techniques, data collection methods, data collection instruments, procedure of data collection, reliability and validity of instruments, data analysis, measurement of variables, data presentation and analysis as well as the limitations to the study.

3.1 Research Design

A research design is a framework for the gathering and analysis of information to answer studies query and meet studies goals with a reasoned justification for data collection methods and evaluation techniques (Saunders, Lewis & Thornhill, 2015). The study adopted a case study design whose focus was on iron and steel manufacturing firms found in a single entity being Kampala Industrial and Business Park (KIBP). The case study approach was adopted in order to place more emphasis on an in-depth contextual analysis of events and their interrelationship (Yin, 2009). According to Cooper & Schindler (2008), a case study research design bases on a practical, logical and structured manner of the organization relating to the area of study. The study used structured questionnaires having both open-ended and closed ended questions to obtain quantitative data (Yin, 2012). A quantitative approach was considered suitable as the purpose of the study is to examine the effect of financial distress on profitability of manufacturing firms from a statistical perspective. Further, a quantitative approach is commonly was applied in research when working with statistical figures. A deductive technique was considered most suitable as the research was based on existing theory and the results of previous research. The empirical results were tested and compared to previous research, hence it is was considered a deductive approach (Saunders *et al.*, 2015). While qualitative data was obtained using interview guide to achieve the desired results. Qualitative approach facilitates building theories to explore new areas through thorough examination of the phenomenon. Quantitative approach allowed

the researcher to statistically and analyze numeric data (Bryman, 2015). This study utilizes a quantitative and deductive approach. The study used quantitative approach to gain a higher expertise and in-depth knowledge of the consequences of financial distress on profitability.

3.2 Population of the Study

A population is defined as total collection of elements about which inferences are made (Cooper & Schindler, 2014). The population was 65 published financially distressed manufacturing firms (UMA, 2017), out of which 23 were iron and steel manufacturing firms from which the leading five 5 were published as squealing, totally-financially distressed and seeking for government bail-out. The target population was the five top iron and steel firms. The study population also consisted of 20 employees in the finance department in the four selected manufacturing companies. The respondents were mainly the Finance officers who prepare final accounts, manage receivables, payables and inventory. These are directly involved in the preparation and presentation of the financial statements from which secondary data was obtained. Financial staff were included the study because they control the flow of funds in terms of revenue and expenditures hence were able to provide explanations to the financial decisions undertaken to influence financial distress and profitability of these manufacturing firms.

3.3 Sample, Sampling Frame, Size and Technique

3.3.1 Sample

Bryman (2008) and Spiegel (2008) define a sample as a part of the total population. However, Kothari (2011) defines a sample as a collection of units chosen from the universe to represent it. A sample is a proportion of the population being examined under a study. Thus the sampling design refers to the definite procedure that the researcher used in selecting the items from the population that form the sample. In this study, random sampling was used to arrive at the desired sample size.

3.3.2 Sampling Frame

The sampling frame for any probability sample is a complete description of all the cases in the target population from which the sample is drawn (Saunders, Lewis & Thornhill, 2015). Sampling frame is defined as a list of elements from which a sample is actually drawn (Cooper & Schindler, 2011).

3.3.3 Sample Size

Out of 65 enterprises, four steel enterprises were selected considering the study period from 2014 to 2018. The sample frame for this study consisted of: finance directors(04), chief finance Officers(01), accountants(01), inventory controllers (02), Senior Accountants(04), credit officers(04), production

managers(02) and Risk management Officers(02) in each of the manufacturing firms and using the sample formula:

Equation 5: sample size formula derived from Yamane (1967)

$$n = \frac{N}{1 + N(e^2)} \text{ derived from Yamane (1967) formula cited in Sekaran \& Bougie (2013).}$$

The total population of 20 employees were taken to represent that sample size of the study.

Where: n = sample size
N = Population
e = error

At 95% confidence interval and a population of 20 the sample size will be calculated as:

$$\begin{aligned} n &= \frac{20}{1 + [20(0.05)^2]} \\ &= \frac{20}{1 + 0.5} \\ &= \frac{20}{1.5} \\ \text{Sample size} &= 13 \end{aligned}$$

3.3.5 Design and Technique

The five leading iron and steel manufacturing firms published as financially distressed and needed government bailout and were engaged in active trading throughout the five-year period (2014-2018) were selected to constitute the sample and with published financial results for up-to the financial year 2018/19 having the latest financial statements published. Four manufacturing firms were selected to participate in the study randomly based on the level of indebtedness. Purposive sampling was used to select the finance officers for this study. This thus resulted in saving time and cost of undertaking the study. Finance staff also obtained relevant confidential information relating to financial distress and profitability. These dealt directly with both policies and understood its implication on profitability and thus had rich and deeper information necessary for the success of this study. Gill and Johnson (2010) observe that purposive sampling enables a researcher to select samples that will yield the most comprehensive understanding of the subject matter.

3.4 Data Sources

According to Saunders *et al.* (2009) there are two types of data, primary and secondary, where researchers tend to overlook existing data in preference of create one's own database. Both Primary and secondary data were used to collect data from the field.

3.4.1 Primary Data

The primary data was collected using interviews. interviewing helped the research to gather in-depth data through probing. The researcher involved one-on-one interviews with the finance staff of the steel manufacturing firms to obtain qualitative data (Amin, 2005). In this study, the probing interviewing tactic was extensively used to obtain a deeper explanation of about financial distress factors affecting profitability of steel manufacturing firms (Saunders *et al.*, 2012).

3.4.2 Secondary Data

Secondary data was obtained from annual financial statements. These included the financial performance Reports for four companies published between the period 2014 and 2018. This particular use of secondary data considered by the researchers to be in line with what Saunders *et al.* (2009) consider to be reliable data. The publication of an annual report is mandatory for publicly registrar of Companies and Uganda Security Exchange. The researcher thoroughly reviewed these documents to obtain supplementary data to that provided by the respondents from interviews.

3.5 Data Collection Methods

The study used only interviewing as well as documentary review methods as explained below

3.5.1 Interviewing Method

An interview is an interaction between the interviewee or interviewer(s) where questions were asked by the interviewer to obtain facts or statements from the key informants. Interviews were used because they aided to gather detailed information through inquisitive means. Interviewing aided to collect descriptive data or qualitative data to complement information presented in financial statements. Interviewing was done to capture data from the key informants who were mainly financial controllers/managers. This was because much detailed information was needed from this category of respondents. Financial managers gave adequate and reliable information related to financial distress and profitability.

3.5.2 Documentary Review

The study also made use of financial documents that included annual financial reports. The documents were thoroughly reviewed by the researcher to obtain secondary data. These provided supplementary

data to that earlier obtained from key informants using interview guide. The secondary literature reviewed was used for cross- referencing the findings of the study.

3.6 Data Collection Instruments

3.6.1 Interview Guide

An interview is a conversation between two or more people where questions are asked by the interviewer to elicit facts or statements from the interviewee. Interview guide were used to collect qualitative data from directors and financial Managers of four iron and steel manufacturing firms. Each company had only one financial manager and one financial director whom the human resource managers helped in identifying. Interviewing method helped to obtain in-depth and detailed information through probing during face-to-face interaction. Interviews helped to obtain detailed information by ensuring probing for more information, clarification and capturing facial expression of the interviewees about financial distress and profitability of steel manufacturing firms.

3.6.2 Documentary Review Checklist

The documentary review check-list was used for purposes of reviewing financial data. Documentary data was obtained from published annual reports. This provided a baseline with which the collected primary data results was compared to secondary data from annual financial statements.

Data on financial distress and profitability collected mainly from annual published financial statements for the 2014-2018 year study. The data was gathered using data collection survey sheet (appendix 1). This enabled computation of the dependent variables of APP, ARP, ICC, ROA, ROE and profitability. The use of this particular secondary data considered by the researchers to be in line with what Saunders *et al.* (2009) consider to be reliable data. The publication of an annual report is mandatory for publicly registrar of Companies has the obligation to report its financial performance each fiscal year (Bolagsverket, 2015).

Data was obtained from organizational websites of Uganda Manufacturers Association, Uganda Securities Exchange (USE) and Uganda Investment Authority and on-line publications. The data collected span a period of five years covering the period 2014 to 2018. The reason for restriction to the period of this study to five years is that the latest data readily available and relevant for accurate results.

3.7 Research Procedures

The researcher obtained an introductory letter from Kyambogo University Graduate School introducing himself to the Manufacturing firms business owners. The letter was used to introduce the researcher as a student of Kyambogo University and explain the purpose of the research. In addition, the letter was used to request for permission to carry out interviews with financial controllers. The researcher recruited two research assistants to ensure that the influence of personal factors of the research during data collection are minimised by bringing neutrality. The researcher trained the research assistants for three days before going to the field to ensure quality work. The researcher also made contacts with various staff for appointments on interview dates and time. This approach enabled the researcher to make proper planning and mobilisation of resources. The researcher together with the research assistants visited the respondents to collect data as per the agreed dates.

3.8 Validity and Reliability of the Instrument

3.8.1 Validity

Validity refers to whether the study tool measures what it purports to measure (Bryman, 2008; Saunders *et al.*, 2009). The validity of a research is focused on the measurements the research interview guide. Mcmillan and Schumacher (2010) describe validity as the degree of congruence between explanations of phenomena and the realities of the world. While absolute validity is difficult to establish, demonstrating the validity of a developing measure is very important in research (Bryman, 2008). This study applied both construct validity and content validity.

Saunders *et al.* (2009) explain construct validity as the extent to which the measurement questions actually measure the presence of those constructs intended to be measure. In this study and for the purpose of construct validity, the interview guide was divided into various sections to ensure that each concept in the conceptual framework and also ensure that the objectives are closely tied to conceptual framework of the study. On the other hand, content validity is the extent to which the measurement device provides adequate coverage of investigative questions. Creswell (2003) suggests that a colleague and / or an external auditor provide additional insight into the study and research findings. To ensure content validity the interview guide was subjected to thorough examination by two independent supervisors, from the accounts department. The resource persons were asked to evaluate the statements in the interview guide for relevance and whether they are meaningful and clear. On the basis of evaluation, the instrument was adjusted appropriately before

subjecting it to the final data collection exercise. Quality items were chosen from review of relevant theoretical and empirical literature of accounts payable practices, accounts receivable days, inventory practices and profitability. These items were used to construct the interview guide (Kovacic, 2017). Thereafter questions were edited and corrected accordingly to enhance a content validity test which was computed using the formula

Equation 6: Content validity index

$$\text{Content validity index (CVI)} = \frac{\text{Total number of items rated as relevant}}{\text{Total number of items judged}}$$

The CVI above 0.7 as an average were considered valid and reliable enough to collect data, (Zhong, Xue, Bao & Yi, 2012).

3.8.2 Reliability

According to Bryman (2016) reliability in research is related to whether the results of the study can be consistent if the study is repeated with the same data and method. In this particular research, published financial reports which adds reliability, as secondary data of this sort is often very reliable (Saunders et al., 2009). Reliability has been defined by various scholars as the repeatability, stability or internal consistency of a study tools (Bryman, 2008; Cooper & Schindler, 2011; Mcmillan & Schumacher, 2010). Bryman and Bell (2011) states three key terms of what reliability in research consists of: stability, internal reliability and inter-observer consistency. In this study, the Cronbach's alpha was used to determine how reliable the instrument is. The reliability co-efficient tells the consistency of the tool to yield reliable facts. Cronbach's alpha was used to test the reliability of the measures in the interview guide (Cronbach, 1951). Bryman (2008) suggests that where cronbach alpha is used for reliability test, as a rule of thumb, cronbach alpha values for items to be included in a study should not be lower than 0.8. Gliem and Gliem (2003) recommend a cronbach that exceeds 0.7. In this study, reliability of 0.7 and above was considered acceptable and the formula developed by Cronbach was used to calculate the alpha (Cronbach, 1951). Further still Sekaran (2010) and Cooper and Schindler (2011) assert that cronbach's alpha has the most utility for multi-item scales at the interval level of measurement. The study ensured the targeted interviewees respond positively.

Table 3. 1: Cronbach's Alpha coefficients for the variables under study

Variable	Anchor	Cronbach Alpha Coefficient	CVI
Accounts payables period	5 Point	0.76	0.7
Accounts receivables days	5 Point	0.74	0.8
Inventory days	5 Point	0.77	0.9
Profitability	5 Point	0.79	0.7

Source: Primary data (2018)

The Cronbach Alpha and the Content Validity Index above 0.7 computed were accepted, showing that the research instrument was reliable. As such, it was deemed fit for use to collect data on these study variables so as. The research instrument used in this study was developed based on the research objectives. A pre-test was done to confirm flow, accuracy, and clarity of the interview questions. Where necessary adjustments were made before the final administration. The purpose of a pilot test is to detect weaknesses in the design and implementation of a tool and to provide proxy for data collection of a probability sample (Cooper & Schindler, 2011). Other scholars argue that the purpose of pilot testing is to establish the accuracy and appropriateness of the research design and instrumentation (Saunders *et al.*, 2007 & Bryman, 2008). Pilot testing has dual advantages; first, is to catch potential problems, costly mistakes, provide an indication of time required for actual field work and possible modifications of the instrument and modality of data collection, second, enhancing the training of field staff, review of the instrument, prevention of wasteful expenditures on a full blown survey whose results may not be acceptable (Dikko, 2016). Thus, to check the validity and reliability of the interview guide gathering the data required for the purposes of the study, a pilot study was carried out.

3.9 Data Processing and Analysis

3.9.1 Quantitative data Analysis

The data was obtained a documentary checklist that included financial statements. The data was put in order and structured to get meaning from data (Craig, *et al.*, 2011). The raw data was statistically analyzed using both Microsoft excel to extract trend analysis while the statistical package for social sciences (SPSS) software package provided a multiple regression model. The multi-regression analysis was used to analyse the association among the independent variables and the dependent variable (McNabb, 2008).

Equation 7: multi-regression analysis model

$$\text{Profitability, } P = \beta_0 + \beta_1(\text{AP}) + \beta_2(\text{AR}) + \beta_3(\text{IP}) + e$$

Where:	AP	=	Accounts payable period
	AR	=	Accounts receivable period
	IP	=	Inventory Period
	e	=	Error term
	$\beta_0 - \beta_3$	=	coefficients of the independent variables

The analysis was done to determine whether the financial distress (measured by payable period, receivable period and inventory period) affect profitability of the manufacturing firms.

3.9.2 Qualitative Data Analysis

The researcher used content analysis, which is a scientific and systematic method for observing and analysing information to analyse and interpret interview results. Although content analysis is primarily a qualitative method of analysis, it has some advantages which allowed a quantitative element to be included using techniques such as frequency analysis (Chenail, 2011)). Content Analysis is a replicable methodology (Dikko, 2016). This helps to summarise the intrinsic value of information, without the disadvantage of bias. content analysis is highly flexible (Dikko, 2016), which made it more efficient as financial distress involves various fields (e.g. marketing, human resource management, and stakeholder management) and these are not easy to categorise unless one uses content analysis. Qualitative data was collected using interview guide during the discussion with the finance officers and documentary review. Descriptive data/statistics was categorized under different themes and sub-themes using critical judgmental approach and quotations to obtain meaningful inferences. The data was analyzed and organized based on pattern, repetitions and commonalities into themes based on study variables and information were recorded and summarised using an excel sheet, and themes obtained (Van & Harrison, 2013).

3.9.3 Models used to be used in the Study

This study utilized a simple linear regression model in the program in Microsoft excel and multiple regression model in SPSS in order to examine the association between Financial Distress and profitability variables. A simple linear regression is commonly was used as a statistical method to measure the relationship between one dependent variable and one independent variable (Keleş, 2018). It was also used to evaluate the direction (positive/negative) and the strength of the relationship between the two variables (Ding, Chu, Jin & Zhu, 2013). The direction of the variables is represented by the Beta value which describes how much the independent variable changes the dependent variable (Ding, *et.al.*, 2013). In turn, the strength of the relationship is explained by the R squared value, which tells how much the independent variable explains the relationship with the dependent variable. In order for the relationship between the independent and dependent variable to considered reliable, common practice is to only consider results reliable when the P-value be no less than 0.05 (Ding, *et.al.* 2013).

There is however instances in which researchers allow a more relaxed lower boundary set at 0.1 (Wang *et al.* 2014).

3.10 Measurement of Variables

Financial distress as the independent variable was measured in terms of accounts payables period, accounts receivables period and inventory period. Whereas profitability as the dependent variable will be measured by Return on Investment, (ROI); Return on Asset (ROA) and Earning Before Interest and Tax (EBIT). Profit = (Sales - Cost of Goods Sold) / (Total Assets - Financial Assets)

Where Average Recoverable Period (ARP) is defined as the number of the days was needed to collect the receivables. In other words, it is the average period for which receivables are outstanding. The information about the net annual sales of the firm and the average beginning and ending receivables are used (Mohammadi, 2007):

$$\text{Average Collection Period} = \frac{\text{Average Accounts Receivables} \times 365}{\text{Net Sales}}$$

Where ICP is the inventory conversion period (ICP): the average number of days to convert raw materials into finished products and then selling them to customers. Inventory period is calculated by dividing average inventory by average sales per day.

$$\text{Inventory Conversion Period, ICP} = \frac{\text{Average Inventory} \times 365}{\text{Net Sales}}$$

and finally Average Payment Period (APP) is the number of days a company takes to pay off the accounts payable. The average beginning and ending accounts payable are used to measure the average payment period (Mathuva, 2010):

$$\text{Average Payment Period, APP} = \frac{\text{Average Accounts Payable} \times 365}{\text{Net Sales}}$$

Table 3. 2: measurement of variables

Measures of Financial Distress	Computation Formula
Receivable days	= (accounts receivable x 365) / sales
Payable days	= (accounts payable x 365) / purchases
Inventory days	= (inventories x 365) / cost of sales

Source: secondary data (2018)

$$\text{ROE} = \frac{\text{EBIT}}{\text{EQUITY}}$$

$$\text{RoA} = \frac{\text{EBIT}}{\text{TOTAL ASSETS}}$$

Profitability ratios measure a firm's overall efficiency and effectiveness in generating profit. They are calculated by establishing profit figures on the one hand, and sales or assets on the other hand. The term profitability was measured in different ways by the researcher. It was measured as Return on Equity (ROE) and Return on Asset (ROA). To set up a operating "success" or "failure" of firms and profitability, Earning Before Interest and Tax (EBIT) were used as a base to calculate ROA as dependent variable.

$$\text{Return On Assets, ROA} = \frac{\text{Earning Before Interest and Tax, EBIT}}{\text{Total Assets (TA)}}$$

$$\text{Return on Equity} = \frac{\text{Earning Before Interest and Tax, EBIT}}{\text{Total Equity}}$$

3.10.2 Test of Significance

The t-test takes two sets of data and then examines whether the average of the two group are statistically different from each other. For example this was used to analyze if the increase in profitability is mainly caused by proper management of accounts payables, accounts receivables as well as inventory. The test were carried out at 5% significance level. The result were significant if the value of P being equal to or less that 5%.

Test of Association

This approach was used to evaluate the effect of financial distress on profitability. Two methods were used in testing the association using the regression analysis technique and coefficients of the trend analysis.

3.11 Ethical Considerations

The research was carried out basing on the laws/ regulations governing research. Permission to conduct the research was obtained from the Graduate school such as an introductory letter from the Dean Graduate School- Kyambogo University. This was presented to the Directors Human Resource of the different manufacturing firms. To grant authority to interview finance officers. Further still, permission was also obtained from the individual respondents interviewed.

The researcher further assured that respondents of the utmost confidentiality that only data could be used to draw conclusions to the study for academic purposes. Respondents verbally consented to

participate in the study. The ethical aspect of data collection was often an important consideration for researchers in describing how and why data was collected. The most common considerations researchers needed to consider during data collection was if there was any potential harm of participants, a risk of privacy invasion or any form of deception or lack of informed consent (Bryman & Bell, 2011). The ethical issues concerning the use of secondary data, as in this research, was considered difficult to determine as it concerns more of collective quality of the data (Saunders et al., 2009). A potential ethical issue that occurred through the use of secondary data was that it ended up being used in a way which it was not initially meant to or raise questions regarding the legal rights of utilizing the data (Bryman & Bell, 2011). The ethical issues connected to the use of secondary data in this research was considered minimal seeing as the financial distress and financial reports published on websites of the respective owners of that information and it being dedicated or meant for public review.

3.12 Limitations of the Study

Throughout this study the researcher faced some limitations in carrying out the study, common limitation where disclosure of some of the information as discussed below;

This study was limited to the sample of Ugandan iron and steel manufacturing firms not listed on Uganda security exchange. The findings of this study could only be generalized to manufacturing firms similar to those that were included in this research.

The study was conducted to examine the effect of financial distress on firms' profitability, there are lots of measures one can choose to measure the profitability of the firm like gross operating profit, net operating profit, return on assets, return on capital etc. However, it was not possible for researcher to conduct a research by considering all the measures of the profitability. So, ROA and RoE were chosen by researcher to measure of profitability.

Lastly, the study was conducted over the period of five years from 2014 to 2018 which is shorter compare to other researchers of different countries.

Researcher also was unable to get some of the financial data of some companies for some years which lead him not to produce meaningful interpretation for some of the specific research objectives.

Information disclosure: This is the one of the limitation researcher faced when carrying out the study, Interview where having time hard time to give sensitive information on what they have done so far, the reasons observed was fear of being seen as if they have done not too much to society.

Corporation: Research received little corporation from some of the interviewees, the reasons behind is that they are too busy to get time to be interviewed and gave detailed information.

Conclusion

This chapter attempts to describe the detailed research methodology, which is the step by step approach to aid collecting detailed information to enhance presentation of findings. Therefore, this chapter provided a basis for chapter four of the dissertation which focuses on analysis of the results. The chapter looked at the methodology applied for the study, which includes what the population of the study is and how the sample could be arrived at. It also gave a breakdown of the data collection instrument as well as how the data was collected, presented and analysed.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.0 Introduction

This chapter discusses the data presentation, interpretation and analysis of the findings purposely to disclose the effect of financial distress on profitability of four iron and steel manufacturing firms in Kampala Industrial and Business Park (KIBP). Data obtained from financial statements is presented descriptively and inferential statistics analysed. ROA and ROE percentages and adjusted R square values were used to interpret and analyse quantitative data. Qualitative data was qualitative analyse concurrently with quantitative data thematically using content analysis. The chapter first presents demographic information followed by the three objectives spelt one earlier in chapter one, the cash conversion cycle combining the three independent variables, debt-equity ratio explaining the level of indebtedness of steel manufacturing firms and finally regression analysis is presented.

4.1 Response Rate

Out of the targeted sample of five iron and steel manufacturing firms, only four firms with updated financial statements to the end of 2018 accounting period participated in the study. This gives a response rate of 80%. On the other hand, from a sample 13 financial managers and controllers who were targeted for interviews, all participated representing 100% response. The finding is in tandem with by Mubanzi (2009) who justified that a response rate of 50% and above is acceptable for the study results to be dependable and truthful.

4.2 Demographic information about companies

The demographic characteristics about the respondents and the steel manufacturing firms involved in the study included: Gender, Age Bracket, Position and period of service, Duration of the firm and number of employees.

4.2.1 Gender

The gender distribution of the respondents aided the study to draw conclusions regarding the degree of congruence of responses with the gender characteristics on financial distress and profitability of steel iron and steel manufacturing firms in KIBP. The results of the study are presented in the figure below.

Table 4. 1: Illustrating the Gender Distribution of the respondents

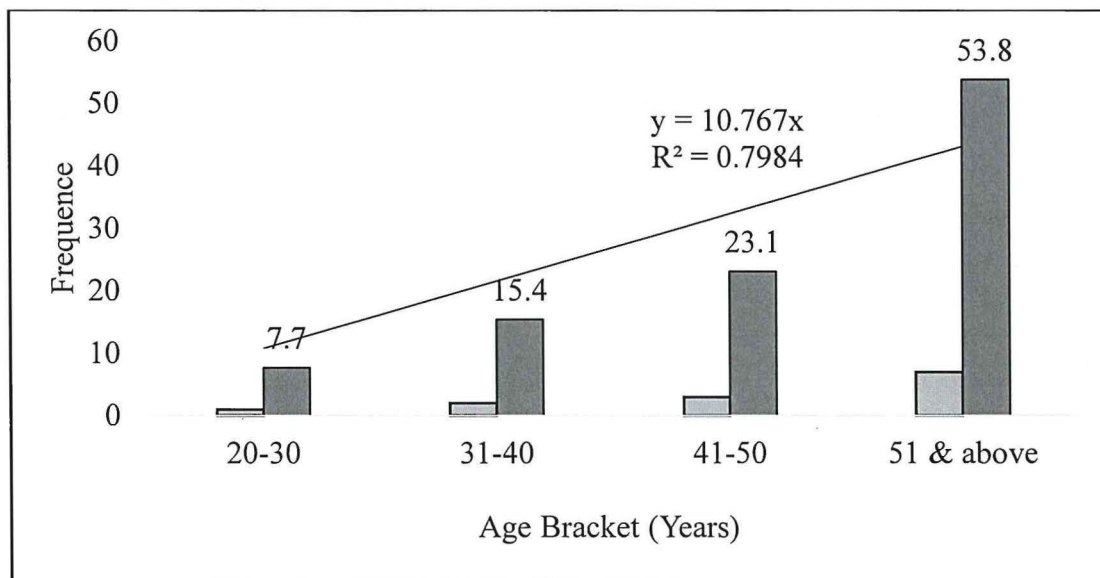
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	07	53.8	53.8	53.8
Valid Female	06	46.2	46.2	100.0
Total	13	100.0	100.0	

Source: Primary Data (2018)

The results as shown in the table 4.1 reveal that majority of the respondent were male represented by 53.8 % while female consisted of 46.2%. The results indicate that majority of the staff were males although obtaining data from both gender helped to obtain more objective data about the effect of financial distress on profitability of steel iron and steel manufacturing firms in KIBP .

4.2.2 Age Bracket

The study sought to discern the age category of the respondents. This was expected to guide the research on understanding the most active age group in regard to handling financial resources against profitability of an entity. The results are presented as follows;



Source: Primary Data (2018)

Figure 4. 1: Illustrating the age bracket of the respondents

Figure 4.1 above shows that majority, 53.8% of the respondents were aged 51 years and above. These were followed by the age group of 41-50 represented by 23.1%. The table further reveals that the age bracket of 31-40 years consisted of 15.4% of the respondents while the age bracket of 20-30 comprised of 7.7% of the sample. This indicates that all categories financial controllers and managers from the

four steel manufacturing companies were mature with diversified data about issues work and have responsibility the companies to provide reliable on financial distress and profitability to a tune of 79.84%.

4.2.3 Period of service and Position

In bid to ascertain the Period of service and Position held by the financial managers, the research administered a research tool whose findings are presented as follows;

Table 4. 2: Period of service and Position

Period of Service	Frequency	Percent	Position	Frequency	Percent
1 – 5 years	03	23.1	Finance directors	04	30.8
6 – 10 years	05	38.5	Chief Finance Officers	04	30.8
Valid 11 - 15 years	03	23.1	Accountants	03	23.1
Over 16 years	02	15.3	Inventory Controllers	02	15.3
Total	13	100		13	100

Source: Primary Data (2018)

From Table 4.2 above, illustrates that majority 38% of the staff had worked with steel manufacturing firms for a period of 6-10years, an equal number of staff (23.1%) had served manufacturing firms for a period 1-5years and 11-15years respectively while only 15.3% had worked for the companies for a period of over 16years. The results signify that staff had all worked for long period of more than 5years with these sampled companies and thus had adequate knowledge and information about their operations and therefore were in better position to explain matters of financial distress and influence the corresponding effect on profitability.

Table 4.2 further shows that 30.8% of the respondents interviewed, held the financial director title and chief finance officer respectively, 23.1% were accountants while 15.3% were inventory managers. The implication of this result is that all staff responsible to managing receivables, controlling payables as well as inventory to determine the entities profitability were involved in the study to substantiate and supplement quantitative data.

4.2.4 Duration of Operation, Products and Client base

In bid to elicit data about the number of years the company had prevailed in the market, the following information was obtained;

Table 4. 3: Period of Establishment, Products and Client Base

Company	Commencement	Products	Clients
STIL 1	2003 (15yrs)	Galvanized Iron Sheets, Mat-tiles Sheets, Hollow Sections, Expanded Metals, Bottle Sections, Fascia Boards	-Building contractors and Plumbers, Industries and Institutions, Authorised stockists and Governments & NGOs
SAIL 2	1984(34years)	household utensils like sufurias, frying pans, casseroles, stew pans, saucepans, milk cans, cookery, kettles	trading of commodities with a retail/wholesale for housing and infrastructural development
RRM 3	1994 (24years)	Galvanized & pre-painted iron sheets, Hollow sections, Mild steel plates, Open profiles, Wire products, Galvanized wire, Pvc Trading items, Accessories, galvanised wire mesh,electrodes iron bars, nails	trading of commodities with a retail/wholesale for housing and infrastructural development
SRM 4	2002 (16years)	Galvanized Iron Sheets, Mat-tiles Sheets, Hollow Sections, Expanded Metals, Bottle Sections, Fascia Boards	trading of commodities with a retail/wholesale for housing and infrastructural development

Source: Primary Data (2018)

From table 4.3 above company STIL 1 had existed for fifteen years, SAIL 2, had served in the market for thirty four years, RRM 3 had existed for twenty four years while the SRM 4 had been in Uganda for sixteen years. This implies that iron and steel industry as a back bone for industrialization in developed and developing countries cannot support Uganda development since the steel firms above have existed for long period in commercial production but struggling to survive due to shortage of raw materials that compel production below capacity yet Uganda has the highest quality iron ores in the world (500million tonnes or iron ore) but only 0.0033 is utilised.

4.2.5 Number of Employees and Minimum/Maximum wage

The study further examined the employment capability of the steel firms whose results were tabulated as below;

Table 4. 4: Staff capacity and wage level

Company	No of workers	Minimum wage (Ugx)	Maximum wage (Ugx)
STIL 1	2452	100,000	2,300,400
SAIL 2	1843	90,000	1,850,100
RRM 3	1428	105,000	2,100,800
SRM 4	1067	125,000	1,550,500

Source: Primary Data (2018)

The above table illustrates that company one employee approximately two thousand four hundred fifty-two workers and paying a wage rate ranging from one hundred thousand shilling to two million three hundred thousand four hundred. The second company employees one thousand eight hundred forty three staff who earn between ninety thousand and one million eight hundred fifty thousand one hundred. The third company had one thousand four hundred twenty-eight staff who are paid between one hundred five thousand and two millions one hundred thousand eight hundred shilling per month. Finally, table 4.4 demonstrates that company four employees one thousand sixty-seven employees and pays a minimum wage of one hundred twenty-five thousand and a maximum wage of one million five hundred and fifty thousand five hundred per month. The implication of the above finding is that the steel manufacturing firms employee many workers but pay over 90% meagre wages at the minimum wage while administrators who compromise of less than 10% of the total workers earn the maximum wage. The employment level and the total investment for the whole steel industry stands at about 5000 workers and USD 1billion respectively.

4.2.6 Installation capacity, Production Capacity and unexploited demand of Steel Firms

Company	Installed capacity Metric tonnes per annum	Actual Production MTPa	un exploited Demand	Cost of unexploited demand
STIL 1	400,000	295,000	Karuma dam, Isimba dam, Bujagali dam, Jinja Nile bridge, Entebbe highway express and standard gauge railway	\$133.54
SAIL 2	150,000	15,700		
RRM 3	350,000	154,000		
SRM 4	100,000	46,000		
Total	1,000,000	510,700		

Source: secondary data (2018)

Total installed capacity for the four steel iron and steel manufacturing firms in KIBP is 1,000,000 metric tonnes per annum but actual overall output is 510,700 (51.07%) metric tonnes per annum. The implication of this finding is that Ugandan steel manufacturing firms produce at excessive capacity which has costed the economy to loose USD 135 million in donor funded loans. Underproduction was due to shortage of scrap- the major raw material, frequent break down of old equipment and lack of proper technical skills among workers. High importation of raw materials (70-80%) standing at USD 1.316 trillion in EAC region projected at USD 3.454trillion by 2020. For importation of iron ore and steel raw materials from, Japan, India, Russia, Germany, Egypt, Ukraine, South Africa, Kenya, Rwanda, Burundi, DRC, Tanzania, Sudan. Imported materials include, natural gas and coking coal for reducing impurities in iron ore. Monthly local demand is 6,000 metric tonnes per as compared to the produced 510,700Mtpa. This leaves steel firms to export 98.8% of the products.

4.3 Statistical data on Accounts Payable Period and profitability

The descriptive statistics was compute, so that it gives detail understanding to the trend of financial distress and profitability among the sample firms and it is used to identify the association between the variables from regression analyses.

4.3.1 Tabulation of data APP, ROA and ROE

Table 4. 5: Accounts Payable Period APP, ROA and ROE

Year	Company	Accounts Payables Period (ARP) [days]	Return on Assets (ROA)	Return On Equity (ROE)
2018	STIL 1	402	-10%	-21%
	SAIL 2	105	0%	6%
	RRM 3	739	1%	9%
	SRM 4	678	1%	3%
2017	STIL 1	806	8%	10%
	SAIL 2	547	3%	7%
	RRM 3	399	9%	13%
	SRM 4	108	0%	3%
2016	STIL 1	331	1%	12%
	SAIL 2	90	2%	13%
	RRM 3	256	11%	8%
	SRM 4	390	3%	9%
2015	STIL 1	332	1%	12%
	SAIL 2	246	4%	8%
	RRM 3	367	11%	16%
	SRM 4	313	6%	1%
2014	STIL 1	473	1%	2%
	SAIL 2	106	2%	6%
	RRM 3	379	7%	8%
	SRM 4	324	7%	10%

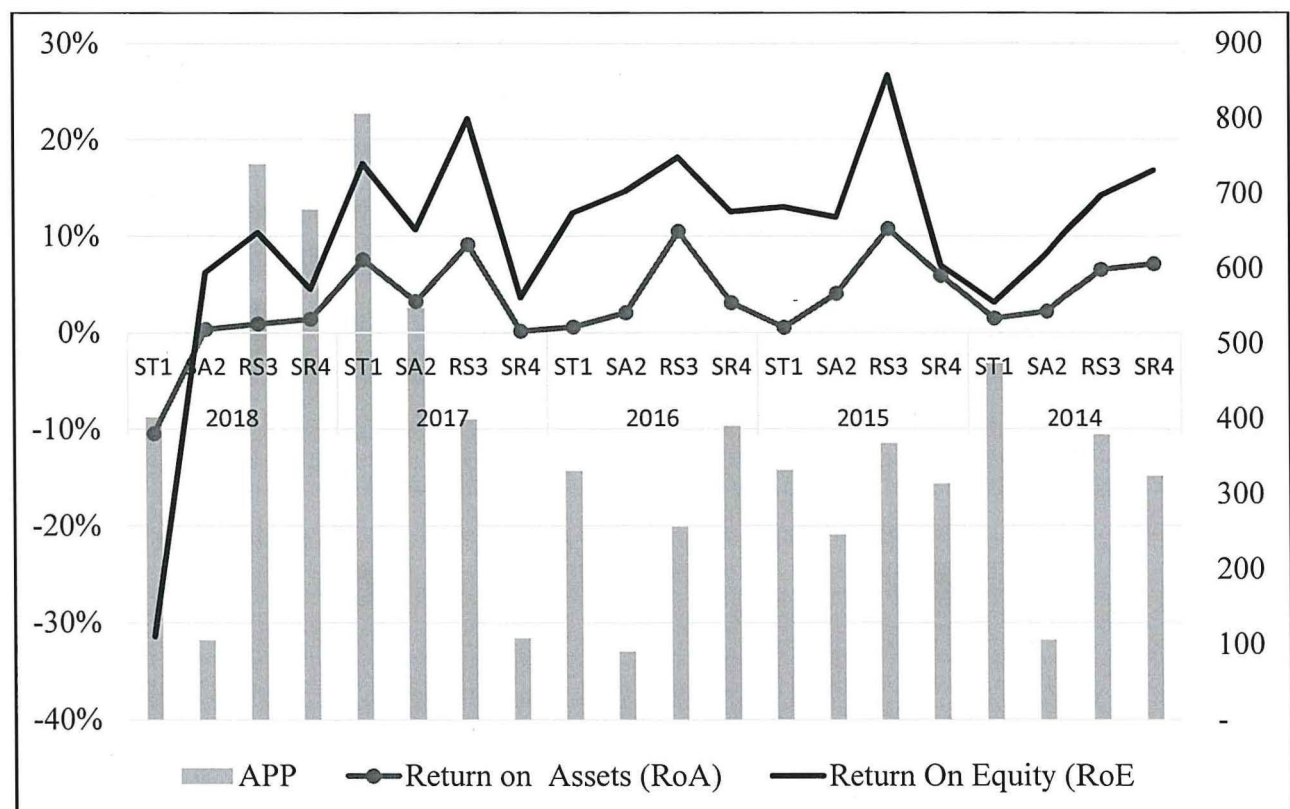
Source: Secondary Data (2018) [Panel Data]

Table 4.5 provides the summary of the Accounts Payable Period and profitability for the four steel manufacturing firms for the past five years. According to table 4.5 above, the movement of ROA and ROE corresponds to that of that of accounts payable period which means that across the steel manufacturing companies in the same industry should experience low ROA and ROE ratios as payable days either increase or decrease. This meant that as firms took longer to pay creditors, they gained increment in working capital with higher liabilities to service which decreased earnings between the period 2014 to 2018. Return on equity and return on assets remained negative in the years 2018, while

it was only in the year 2015 when one still firm had ROA exceeding 10%. Finally, out of the five years of operation, companies ST1 registered an average of 10% in 2017 and 2016 while RS3 obtained 13% and 16% in 2017 and 2015 whereas SR4 in five years made a return on Equity of 10% in 2014. Based on the above ratios, it is predicted that the steel industry will keep positively lowering returns to its investors due to the drastic decrease in the payable days and increase in liabilities. The interpretation of the above finding is that steel manufacturing industries experience low inventory turnover preferably due to high prices of supplies, high costs of production which lowered profitability and left the steel firms with no option but default meeting its their obligations. Hence resources were not well utilized to generate income meaning that high accounts payables had adverse effect on steel manufacturing business.

4.3.2 Illustration of APP, ROA and ROE for four companies for the period 2014-2018

To show how strongly accounts payable are associated to profitability, a scatter diagram was used to extrapolate the association among accounts payables period and APP, ROA and ROE. The points in the scatter diagram will show a tendency to cluster around a straight line. Scatter diagrams are given below:



Source: Computed by the researcher from secondary data of four companies for five years (2018)

Figure 4. 2: Trend Analysis for Accounts Payable, ROA and ROE

Figure 4.2 above demonstrates that the steel industry is chaotic, the economic situation is unravelling. In 2018 both ROE and ROA were -32% and -10% while accounts payable days were low as 90 to 400 compared 2017, when APP day increased to 800, both ROE and ROA increased to 24% and 10%. However the trend was unstable for the entire period. From the graph above, it is still observed that throughout the past 5 years (2014-2018), the steel industry in Wakiso and Kampala industrial parks experienced negative ROA and ROE due to high level of accounts payables. The model indicate that the R square value of -1.31 with a zigzag relation with ROE which meant that companies with higher accounts payables days achieved lower ROA and lower ROE. Delaying or taking longer to settle obligations due to creditors and suppliers of inventory attributed to a decline in profits by 1.31%. Steel manufacturing firms experienced negative ROE due to the negative income and the reason was fall in average unit return on assets resulting from improper management of accounts payable days. The table further implies that Steel firms maintain a level of indebtedness and equity/asset ratio was not attractive borrower. Delayed payments to creditors results into financial crisis through increasing borrowing costs as indicated by the downward trends.

To substantiate this quantitative data, interviewees were conducted with key informants another respondent noted that: In regard to the consumption capacity of steel materials in Uganda? 100% of the key informants interviewed on 1ST Nov. 2018 had this to say;

“Steel consumption per capita currently stands at around 15 Kg/Capita per annum in Uganda compared to the world average of 250 Kg/Capita per annum and 45 Kg Capita per annum in Kenya, this is an indicator that steel manufacturing industry is still at its infancy stage in comparison to both the rest of the developing and developed countries. They added that Uganda’s total steel market is around 585,000 tonnes per annum shared by 20 steel companies here listed: Alarm Groups steel mill, Artech international ltd, Build Matt ltd, China Machine Building International Corporation - Mbarara, Fabrications systems ltd, IBM steel & metal building & fabrication co. Uganda , Mayuge Sugar Industries Ltd, Megha industries, MM Integrated Steel Mills (Uganda) Limited , Pramukh Steel Limited - Njeru , Roofing Rolling Mills Limited - Namanve Industrial Park, Kira Municipality , Roofings Limited - Lubowa , Stainless Weighing Scales in Uganda, Steel and Tubes Industries Uganda Limited - Kampala, Steel Rolling Mills Uganda Limited, Steel Wood Furniture Ltd, Steel works limited, Tembo Steel Mills (Uganda) Limited and Uganda Baati Limited”.

It means that out of the 20 prevailing steel firms, each has to sell only 12.5kg/capita per year or 29250tonnes/annum. The implication of this finding is that the steel industry in Uganda is saturated and there is lack of sufficient internal market due to low consumption and density. This further means

that low demand internal demand constrains profitability. Hence even if government is to bail out such firms they should still search for lucrative market elsewhere for the industry to survive.

Three quarters of the key informants had this to say;

“67.11% (485,200 tonnes) of the raw material for iron and steel making in Uganda are imported, not taking into consideration the accessories; zinc, aluminium among others. Out of the total 165,000 tonnes manufactured through melting scrap and iron ore, iron ore accounts for only 10% (16,500 tonnes) per annum. The ore is used mainly to refine the scrap for some industries. Essentially, out of the 500 million tonnes of iron ore available in the country, only 0.0033% is being utilised per year. Of the total annual iron and steel production of 501,700, only about 165,000 tonnes (32.89%) are produced from scrap and raw iron ore”.

In relation to the above finding it is difficult to increase productivity when firm produce at excess capacity due to over reliance on scrap which constitutes 80% of the inputs. . Excess capacity reduces profitability. Although the average profits for the steel industry was below 10% for the past years. The raising concern regarding how much longer will the industry withstand low profitability.

One respondent had this to say:

“Often-times our suppliers especially from abroad need cash necessitating manufacturing firms to advance them money through their E-payment system payable for future supplies.”

Another question was administered to establish the cost of acquiring raw materials used in steel production, whose response was that;

“At the moment, we incur high cost of importing coking coal from South Africa that is very expensive. Further still, Natural gas is plentiful in Tanzania but steel firms lack a pipeline to transport the gas to the iron ore areas to process the iron ore as the biggest setback. Additionally, Uganda’s Iron Ore as one of the raw materials has a lot of impurities and yet Uganda doesn’t have a reducing agent. This requires steel manufacturing firms to incur high costs of acquiring coal or natural gas to reduce impurities. The iron and steel requirement is about USD 135 million, all of which is imported failure reduction in forex expenditure. Currently, Uganda’s imports of iron and steel products are worth USD 280 million and exports are worth USD 86 million, which represents a trade deficit of USD 194 million”.

High costs of importation characterized by lack of adequate raw materials with the country as well as purifying agents for iron cores compromises productivity and make our local steel firms exposed to foreign exchange risks/exposures, incur high production costs attributing to high pricing for output backed by low demand for steel products produced at home. Above all it provides a competitive age for foreign imported steel products.

From the interview results above, steel manufacturing firms incur high costs of production specifically in importing raw materials as well operational costs in purifying coal.

This means that developing a strong integrated iron and steel industry to facilitate industrial take-off in the country remains wanting. Hence, there will be no saving of forex expenditure, no increase employment opportunities and above all no form of a strong basis to support the growth of other sectors through forward-back ward linkages can be realized in the next 5years (or by 2020 as per the vision 2040, which agitates for Uganda being a middle income country 2020). The industrial sector thus cannot make Uganda pave way for increased local content.

How long does any production process take to meet supplier orders?

“The main challenge is the fluctuations in the load of electricity supplied which causes stoppages and setbacks in fulfilling customer orders. We cannot run furnaces, rolling mills and cold rolling mills with huge motors that use 15-20MW. This has limited competitiveness in production as a result of increased costs. “

Electricity is a useful resource for the development and growth of industrialization. Therefore, as Uganda obtains more funding to create more dams, electricity fluctuations shall reduce, tariffs shall fall and prices decline to facilitate industrial take-off more specifically in 10years time but not by 2010.

What challenges do you encounter in the steel manufacturing industry?

“Other key informants revealed that, the other challenge is the availability of skills given the modern technology which we employ. We are going to great lengths to train our employees in house and also sending engineers to countries like Japan and Germany to enhance their skills. The issue of product standards continues to be a threat to consumers and the local industry as a whole”.

With advancement in technology and need to meet provide answers to global challenges such as quality output, industrial sector cannot withstand using unskilled labour in the 21st century. Hence to produce for exports the steel industry should train workshop from developed country for sustainability.

The key informants also revealed that;

“There is a large influx of substandard products from outside, as well as factories in Uganda producing below standard. This makes our genuine products look expensive at times but in most cases when we measure the specs of the ‘cheaper’ product, we come to find that where the price saving is 10%, the weight of the item is less by 15%, making the end user 5% worse off in choosing some of these products on the shelf”.

In bid to protect the local industries, Ugandan investment authority needs to develop a policy against dumping of steel products from foreign countries. Above all foreign steel products imported in Uganda may be of higher quality and cheaper than Ugandan products. Thus this may attract market against Ugandan steel outputs.

“The other route cause of low consumption is high price for steel products. Consumers are always looking forward for reduction in steel prices yet our prices are determined by the international steel prices. We import most of our raw materials, all valued in dollars. However, international steel prices have picked up last year mainly due to the reduction in production capacity in China as they strive to control pollution. However, prices in Uganda will become more competitive in the future when we ramp up production, start benefiting from reduced costs of doing business and further enjoying economies of scale”.

In regard to the significance of the Iron and Steel Industry to Uganda’s Economy;

Interviewees suggested the following recommendation;

“This can be achieved by government intervention through two ways:

1. Developing a specific incentive regime for investors venturing into iron ore smelting. This can include; a). A ten year corporation tax exemption for re-investment to expand business operations, b). Concessional power tariffs to the sector, c). Exemption of duty on importation of raw materials especially coal, d). Tax exemption on transportation of raw materials sourced from within the country; moving iron ore from the deposits to the factory, e). Capital subsidy to facilitate initial operational costs, f). In the on-going Common External Tariff (CET) review, the zero tariff on wire rods importation should be reviewed as this is produced locally by Tembo Steel Ltd. This will save the country about USD 40 million in importation of wire rods and USD 300 million with the direct reducing iron (DRI) plant established. Monthly national demand for wire rods is 6,000 to Steel Ltd produces 3,000 tonnes but has an installed capacity of 12,000 tonnes. g. Government needs to revoke non-performing licenses held by speculators. This hinders investments in the iron ore mining activities and thus cripples industrial growth.”

“Steel Ltd are supported in the first phase, to establish direct reduced iron (DRI) plants i.e sponge iron production through smelting iron ore, at least 4,000 jobs will be created. With their use of scrap as raw material, the two companies save the country UGX 3.44 trillion in forex expenditure”, says the interviewee

“Uganda’s Vision 2040 states that in the first ten (10) years of its implementation, emphasis will be put on the establishment of economic lifeline industries among which is the iron and steel industry. With industrialization considered to be among the main avenues to use to achieve Vision 2040. Industrialization for job creation and shared prosperity”), a developed iron and steel industry is paramount at least 4,000 jobs have failed to be created. scrap to produce their products, the two companies save the country UGX 3.44 trillion in forex expenditure”, said the interviewee.

According to the national planning authority, development plan (NDPI), development of iron ore to produce ingots that would supply steel industry was not achieved. Further still the exploitation of six mineral iron cores aimed at revitalizing the industrial sector between 2014 and 2020 had never taken off. Therefore, governments commitment to steer economic growth, realise middle income status resulting from industrialization of steel firms is a scuttlebutt. It is difficult to provide an average income of 290,000/= per Ugandan per month or 3.9m to everyone employed within the less than 12 months.

Another interview respondent had this to say:

“Manufacturing companies often borrow against invoices and supply contracts when it needs funds”.

From the interview one respondent noted that:

“most steel manufacturing firms sales are under contractual agreements and on credit which enabled them to increase sales volumes and sales revenue in return.”

Finally,

“As steel firms, we need to continuously-harmoniously improve our dealings with our clients to enable adequate provision of supplies products, provide well stocked stores that are easily accessible to all corners of the country and the African region”.

“Another challenge is the availability of skills given the modern technology which we employ. We are going to great lengths to train our employees in house and also sending engineers to countries like Japan and Germany to enhance their skills. The issue of product standards continues to be a threat to consumers and the local industry as a whole. There is a large influx of substandard products from outside, as well as factories in Uganda producing below standard. This makes our genuine products look expensive at times but in most cases when we measure the specs of the ‘cheaper’ product, we come to find that where the price saving is 10%, the weight of the item is less by 15%, making the end user 5% worse off in choosing some of these products on the shelf. We pledge to continue to work with UNBS and the regional standards bodies to ensure that the population seizes to be cheated”.

“Steel is at the centre of manufacturing, industry and industrialization. That is the reason why the Government of Uganda needs to pay heed to a call by local steel manufacturers for support to build their capacity to meet the various needs that the country has for its big infrastructure investments. By supporting the local steel manufacturers, the Government will not only be building local capacity to meet local needs; thus avoiding importation and dumping of low quality materials by foreign manufacturers, the country will also be creating jobs, building capacity to supply to the regional markets and therefore more revenues to the treasury”.

The interviewees ideology intended at providing break even in the steel sector in paramount because iron and steel are vital materials that find their use in almost all areas of life. Steel is the world’s important structural materials because of high strength in relation to weight and strength. All

equipments are made from steel. Therefore, steel industry development can not only compel industrial growth but contribute towards foreign expenditure savings(\$280m),increase employment(over 4,000jobs created), increase local content in several projects. Hence tax exemptions, capital subsidy, common tariff review concessional power tariffs as well as investment in iron ore mining by government are good mechanisms as well well strategies for national growth and development.

4.3.3 Regression analysis for Accounts Payable Period and profitability for four companies for the period 2014-2018

Table 4. 6: Regression analysis for Accounts Payable Period and profitability

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.258 ^a	.066	.015	.180

a. Predictors: (Constant), APP for four companies for 5years

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.209	1	.209	1.280	.000 ^b
Residual	.294	18	.0163		
Total	.503	19			

a. Dependent Variable: Profitability for four companies for 5years

b. Predictors: (Constant), APP for four companies for 5years

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1416	322		.741	.103
	APP for four companies for 5years	-514	125	.258	1.131	.001

a. Dependent Variable: Profitability for four companies for 5years

Table 4.6 presents the results on the effect of Accounts Payable Period on profitability for four companies for the period 2014-2018. The findings indicate that Accounts Payable Period positively affected profitability (Coefficient: 0.000) though is too low. The association is significant as p-value is less than 0.05, adjusted R-square is 0.015, indicating that all things being equal, 1.5% of the variations in profitability is caused by changes in accounts payable days. While the remaining 98.5% is explained by other factors such as price fluctuation, foreign exchange fluctuation, market demand fluctuation, changes in scope of work and design that influence profitability not incorporated in the model.

4.4 Statistical data on Accounts Receivables Period, ROA and ROE

In bid to establish the findings on the second objective, which was to analyze the effect of accounts receivables on profitability.

4.4.1 Tabulation of data ARP, ROA and ROE

Table 4. 7: Accounts Receivables Period and ROA and ROE

Years	Company	Accounts Receivable Period (ARP)	Return on Assets (ROA)	Return On Equity (ROE)
2018	STIL 1	2	-10%	-21%
	SAIL 2	51	0%	6%
	RRM 3	75	1%	9%
	SRM 4	124	1%	3%
2017	STIL 1	150	8%	10%
	SAIL 2	51	3%	7%
	RRM 3	740	9%	13%
	SRM 4	93	0%	3%
2016	STIL 1	246	1%	12%
	SAIL 2	21	2%	13%
	RRM 3	98	11%	8%
	SRM 4	579	3%	9%
2015	STIL 1	254	1%	12%
	SAIL 2	1300	4%	8%
	RRM 3	782	11%	16%
	SRM 4	467	6%	1%
2014	STIL 1	1732	1%	2%
	SAIL 2	101	2%	6%
	RRM 3	74	7%	8%
	SRM 4	280	7%	10%

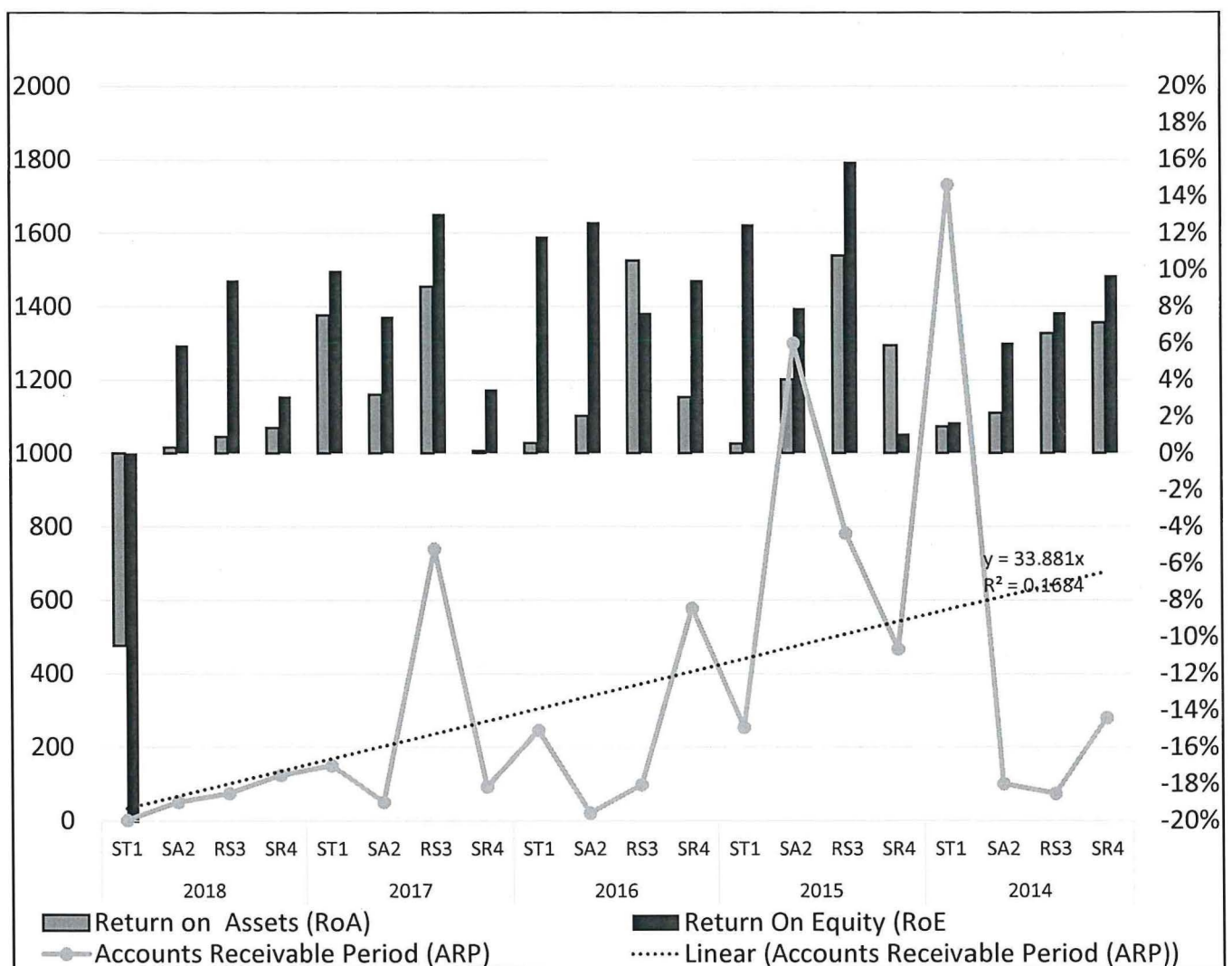
Source: Secondary Data (2018) [Panel Data]

Table 4.7 above indicates findings about Accounts receivable period, a measurement for collection policy, for the four steel manufacturing sampled firms. In the year 2018 ARP ranged between 2 and 124 days but resulted in ROA and ROE to vary between -10% to 1% and -20 and 3%. Further still, In the year 2017 ARP ranged between 51 and 740 days but resulted in ROA and ROE to vary between 0% to 9% and 3% and 13%. Additionally, in the year 2016 ARP ranged between 21 and 574 days but resulted in ROA and ROE to vary between 1% to 11% and 9 and 13%. Also in the year 2015 ARP ranged between 254 and 1300 days but resulted in ROA and ROE to vary between 1% to 11% and 1

and 12%. And finally in the year 2014 ARP ranged between 74 and 280 days but resulted in ROA and ROE to vary between 1% to 7% and 2% and 10%. The interpretation of Table 4.7 results is that account receivable period across all steel manufacturing firms studied none was able to keep receivables days as low as possible. The debtors were allowed a longer period of approximately more than 2years to pay the debts, which accumulated to working capital management problems. This resulted into bad debts being written off and as well as failure to meet daily demands from operations as too much Cash was held by debtors leading to short term liability problems.

4.4.2 Illustration of ARP, ROA and ROE for four companies for the period 2014-2018

Trend analysis was conducted to illustrate further the effect of accounts receivables on profitability. Using a line graph the extent of association between the independent and dependent variables are given below:



Source: Computed by the researcher from secondary data of four companies for five years (2018)

Figure 4. 3: The trend analysis model for ARP, ROA and ROE

Figure 4.3 above shows that between 2017 and 2018 accounts receivables days decreased from 200 days to zero days making ROA and ROE to increase from 16% to -20% and 0% to -10% respectively. The trend analysis being sinusoidal signifies that between 2014 and 2018, both ROA and ROE are explained by 33.881 times changes in accounts receivables days. Debtors took longer to settle their obligations to steel firms. The steel manufacturing industry's accounts receivables period explain 0.1684 changes in both ROA and ROE as indicated by the R square value $r^2 = 0.1684$. The inconsistent sharp rise and fall in ROA and ROE between 2014 and 2016 signify the degree of instability of the steel manufacturing industry. Un unexpected debtors led to huge losses in the industry. The demand for credit sales predicted to rise in ROA and ROE by 16.8% implying that remaining percentage which is 83.7% explains bad debts accrued in the period 2014 to 2018. During that period, steel manufacturing firms were expanding capacity which led to a rise in operating expenses. Steel manufacturing companies collected their receivables within a longer span of time which made them to incur losses rather than profits. These firms incurred higher debtors, bad debt increase and enough lack of cash for settlement of firms liabilities. Accounts receivable have opportunity cost associated with them because company cannot invest this money elsewhere until and unless it collects its receivables.

Interview results

One key informant interviewed had this to say:

“Definitely, accounts receivable management forms part of our working capital management. sometimes we pay suppliers before they deliver goods. Sometimes pays its suppliers in advance before supply of raw materials is another component of accounts receivable that we manage to attain profitability.

One respondent mentioned that

“accounts receivables management at steel manufacturing firm's follows fair trade guidelines” which requires debtors settle their obligation within 90 days. However enforcement of this was difficult because it stretches beyond 90 days”. selling on credit the company had increased sales revenue. This inquiry brought out the benefit of selling on credit which is to boost sales by increasing the customer base to include those customers that may not be able to pay cash on or before delivery. An increase in sales and sales revenue increases profitability.

Most of the companies experience difficulties is collecting receivables which makes them earn below industrial average (between 2.2% and 10% for the period 2014-2018). Thus also attributes to shortage of inputs purchase and production output resulting into low ROA, low ROE as well as profitability.

Another interview revealed that

“most of steel firms credit sales were provided to foreign clients, governments and suppliers. These gave rise to accounts receivable that needed effective management to maintain good profitability. Likewise, He added that, by selling on credit, indeed the company managed to increase its sales volume with the intent of turning them into increase profitability. However, these steel firms found it challenging to offer discounts to debtors in a bid to boost prompt payment but rather borrowed from government against invoices. This compromised cash flow challenges”.

In regard to what strategies to undertake the drive growth of steel industry, key informants had this to say;

“The sets of values which steel firms need to cherish are quality, diversity, customer focus, integrity and innovation. Everything we do revolves around these aspects and value for money. In our recent investment strategy, we are intending to partner with Japan to ensure that we produce only to the highest world standard. We are continuously enhancing and diversifying our product range to ensure that we have a full solution under one roof. For example, we are currently in the process of adding two new forming lines to give more choice to the market amongst other initiatives. It’s imperative for us to have the right amount of inventories to serve the ever growing needs of the market, this is especially the case in Uganda since we are a landlocked country. Our continuous emphasis on ethical business practices has enabled us to be trusted partners of Government in enhancing the steel sector especially with regards to playing field”.

Additionally;

“we are planning to build professional workforce to enable us investment in world class equipment and most stringent quality checks remains paramount to the strengthening steel products’ market”.

One of the respondents during interviews suggested that,

Ugandan government needs to subsidize the steel industry, with steel being a strategic resource. China, for example, subsidizes all national steel producers to enable them to sell to the local market below the production costs. This way steel is available for forging and manufacture of all types of industry equipment including small and medium scale processing plants. Another case in point is the UK Government which injected 109 million British Pounds to resuscitate its manufacturing sector, including the steel industry. This should not be exceptional to Uganda as a developing country which needs to attain middle income status. However, I caution that, the injection of state support however needs to be well planned and aligned to national strategic and long term interests.

The local steel manufacturers also need to be connected to the wider national strategic objectives and therefore connected to national industrialization drive, research and teaching in universities (national capacity building).

One of the directors finance indicated that there is ready market to potentially supply steel to the Standard Gauge Railways (SGR) works and other infrastructure development projects. We argue government to provide financial support (to the tune of

US\$7.2 million -about UGx 25 billion), to raise industrial capacity to supply steel for specifications of the SGR.

4.4.3 Linear Regression analysis for ARP and Profitability

Table 4. 8: Linear Regression analysis for ARP and Profitability

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.186 ^a	.035	-.019	.410

a. Predictors: (Constant), ARP for four companies for 5years

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.109	1	.109	.649	.001 ^b
	Residual	.303	18	0.0168		
	Total	.412	19			

a. Dependent Variable: Profitability for four companies for 5years

b. Predictors: (Constant), ARP for four companies for 5years

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.272	.117		2.317	.004
	ARP for four companies for 5years	-.163	.207	.186	.805	.032

a. Dependent Variable: Profitability for four companies for 5years

Basing on the linear regression analysis results in table 4.8 above, the value of adjusted R square, value which is the coefficient of determination, in the model summary table is -0.019. This indicates that -1.9 percent of the changes in profitability is explained by ARP. ARP attributed to a financial loss of -1.9% in the model. The overall significance of the model in the ANOVA table when measured by F statistics of .649 with P-values of 0.431 suggests that the model fitted well at the 1 percent significance level. The above table further manifest that ARP has a significant negative effect on profitability at the 1 percent significance level.

4.5 Statistical data on Inventory Conversion Period, ROA and ROE

In bid to establish the findings on the third objective, which was to analyze the effect Inventory Conversion Period on profitability, the researcher administered research tools to obtain financial panel data and interview results from financial managers of four steel iron and steel manufacturing firms in KIBP for a period of five years from 2014 to 2018. The findings were presented, analysed and interpreted as follows;

4.5.1 Tabulation of data ICC, ROA and ROE

Table 4. 9: Data on Inventory Conversion Cycle and Profitability

Years	Company	Accounts Payables Period (ARP)	Return on Assets (RoA)	Return On Equity (RoE)
2018	STIL 1	1302	-10%	-21%
	SAIL 2	980	0%	6%
	RRM 3	780	1%	9%
	SRM 4	659	1%	3%
2017	STIL 1	372	8%	10%
	SAIL 2	741	3%	7%
	RRM 3	285	9%	13%
	SRM 4	901	0%	3%
2016	STIL 1	874	1%	12%
	SAIL 2	800	2%	13%
	RRM 3	99	11%	8%
	SRM 4	675	3%	9%
2015	STIL 1	905	1%	12%
	SAIL 2	340	4%	8%
	RRM 3	289	11%	16%
	SRM 4	407	6%	1%
2014	STIL 1	1051	1%	2%
	SAIL 2	989	2%	6%
	RRM 3	546	7%	8%
	SRM 4	483	7%	10%

Source: Secondary Data (2018) [Panel Data]

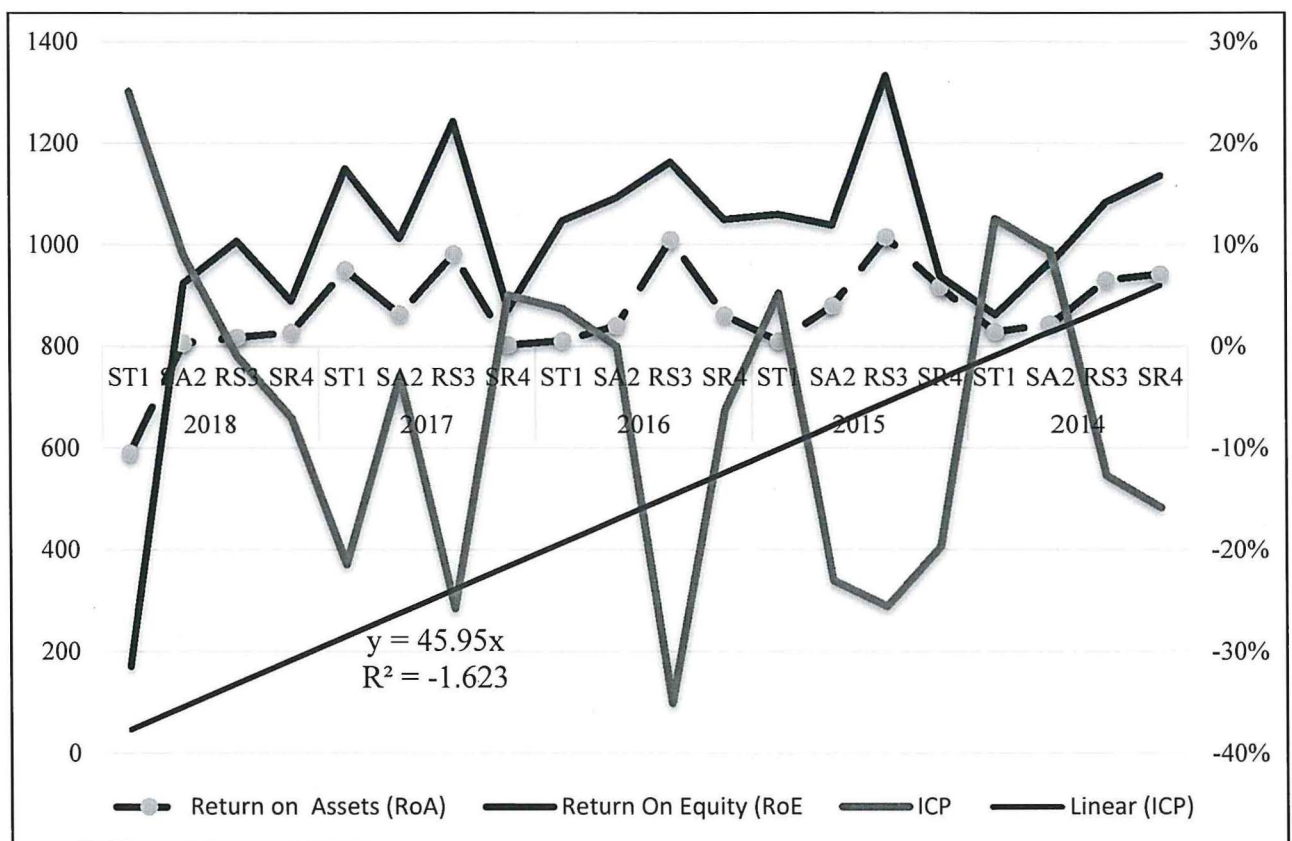
Table 4.9 above indicates that the average value of Inventory conversion period as a proxy for inventory policy is 21,918 days. This means, firms in the sample needs on average 21,918 days to sell inventory. As it is shown in the above table, the standard deviation of inventory holding period is 79,920 days. To

the sample firms the inventory holding period ranges between 11 and 359055 days as minimum and maximum values respectively. The implication of this finding is that the inventory holding period are very long. Although maintaining high inventory levels reduced on the cost of possible interruptions due to the cost of supplying the products frequently in the production process and the loss of business due to scarcity of products attributed, productivity output was low.

Therefore these manufacturing industries avoided stock-outs and failed to strike a balance between the required raw material and work-in-process for their production and finished goods for sale to customers to generate profits. Hence the steel manufacturing companies lacked efficient inventory management, supply chain management, procurement and production which resulted in high inventory balance and long inventory period.

4.4.2 Illustration of ICC, ROA and ROE for four companies for the period 2014-2018

Descriptive statistics was also substantiated by Trend analysis to illustrate further the effect of inventory conversion cycle on profitability. Using a line graph the extent of association between the independent and dependent variables are given below:



Source: Field data (2018)

Figure 4. 4: A graph of Inventory conversion period against profitability

Figure 4.4 demonstrates that in 2018 for company STI, ICP was 1300days when both ROE and ROA were -30% and -10%. When ICP reduced to 1,000days for SA2 both ROE and ROA increased to 0% respectively. From the model summary in figure 4.4, the coefficient of determination value is -1.623, which indicates -162.3% of the variability in the ROA and ROE well explained by the changes in the inventory period. The steel market was volatile to wave nature of the slopes demonstrating unstable trade. Between 2014 and 2018 the inventory conversion period was negative as ROA and ROE remained low between 0% and 10%. The effect of inventory turnover days on ROA and ROE is very strong and negatively significant. This means that inventory turnover period significantly and negatively affected ROA and ROE of steel manufacturing firms in Kampala and Namanve industrial parks. The inventory turnover period increased as losses increased. The longer the inventory was held to meet the production requirements, the more working capital was tied up. These four steel manufacturing firms thus had forgone the opportunity to invest this capital in profitable ventures. This is supported by interview results that follows;

In addition to the secondary data , interview results indicated that,

“At the moment, we do not have capacity to melt Ugandan Local Iron Ore. With time, we are planning to expand and have a Direct-reduced iron (DRI) plant which we can use to melt ore”. However, the biggest setback in this whole plan is that Uganda doesn't have a reducing agent. Iron Ore has a lot of impurities, with only approximately 68% being steel (in Uganda) so you need a huge amount of coal or natural gas to reduce impurities.

Failure to process iron ore will retard the expected growth rate of 9% demand for steel products especially for the construction industry. This anticipated demand of 7.3million and 38.95 million tons demand for Uganda and east African region by 2044 may not be achieved.

At the moment, importing coking coal from South Africa is very expensive. Natural gas is plentiful in Tanzania but we need a pipeline to transport the gas to the iron ore areas to process the iron ore. We are working with the government most specifically, National Planning Authority, to have a more integrated steel industry in Uganda. It is therefore likely to take some time. Above all this, consumers are always looking forward for reduction in steel prices, which is challenging because our prices are determined by the international steel prices especially where we import most of our raw materials all valued in dollars. The shilling also needs to remain stable for stability of our steel prices.

This excessive importation of raw materials is a major contribution to deficit foreign exchange earnings in Uganda. Further still it has worsened the GDP performance as only exports constitute 5.9%, 5.78% and 7.28 and below for the period 2012, 2013 and 2014 through 2018.

4.5.3 Regression analysis for ICC and profitability of the period 2014-2018

Table 4. 10: Linear regression analysis for ICC and profitability

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.174 ^a	.030	-.023	.419

a. Predictors: (Constant), ICC for four companies for 5years

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.458	1	.458	.458	.002 ^b
	Residual	.305	18	.0169		
	Total	.763	19			

a. Dependent Variable: Profitability for four companies for 5years

b. Predictors: (Constant), ICC for four companies for 5years

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.272	.117		2.317	.000
	ARP for four companies for 5years	.163	.203	.186	.805	.031

a. Dependent Variable: Profitability for four companies for 5years

Regression results illustrated adjusted R^2 is -.023, $F = .458$, $p < .05$). The results of model indicate that the coefficient of ICC being positively and statistically significant ($\beta = .163$, $p < 0.05$). This implies that when the number of ICC is increased by one unit, causes an increase in profitability by 16.3 percent. This implies that effective management of ICC causes a loss to steel manufacturing firms to a tune of adjusted $r^2 = -2.3\%$. Only 2.3% variation in loss was caused by changes in ICC. This makes the results to be insignificant. The remaining 98.7% is explained by other factors hindering ICC not incorporated in the model such as longer order period, shortage of electricity supply and or unstable power supply, unskilled workforce who take longer to produce due to shortage of technical expertise, too much impurities in the iron ore among others.

The Debt-Equity ratio is used to evaluate the long-term solvency of a firm. In another meaning, it is one of the financial leverage tools to show what is the proportional distribution of liabilities and equity that company often uses to finance its assets.

A debt ratio of 2.5 means that the assets of the company are funded 5-1 by investors to creditors. Obviously, a high ratio is so risky since investors have not funded the company's operations as much as creditors have. As can be seen in the debt-to-equity graph, steel manufacturing firms had remarkable fluctuation in debt-equity ratio from 2014 to 2018. After an increase in 2014 at the rate of 1.55, the trend was followed by a decrease in 2015 and after that, it rose up 1.22 at the beginning of 2017 before a sharp fall in 2014 by 83%. In addition, in 2016.

In line with the above finding, documentary and Interview results are as follows;

Documentary review indeed confirmed that the operating profit margin increased from 2014 through to 2018 (Management reports, 2011-2015).

One interview respondent said that:

“Manufacturing firms uses operating profit margin to measure the pricing strategy and operating efficiency by measuring the amount of profit earned per unit of sales revenue made.”

Documentary review revealed that the return on invested capital increased in the year 2014 to 11.6%, then in 2015, to 9.7%, in 2016 to -6.5%, but reduced in the year 2017 to -14% and decreased in 2018 to -15% (financial reports, 2018).

This is a clear indicator as to why parliament decry steel companies evading taxes

One interview respondent mentioned that:

“Manufacturing firms uses the difference between return on shareholders' equity and the return on invested capital to determine the extent shareholders were benefiting in terms of profitability from borrowed funds after payment of interest.”

CHAPTER FIVE

DISCUSSION OF RESULTS, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents discussion of results, summary, conclusions and recommendations related to effect of financial distress on profitability of iron and steel manufacturing firms in KIBP. The point in case were four manufacturing firms located in KIBP. For the purpose of examining and providing empirical evidence on the effects of accounts payable days, accounts receivable days and inventories days on profitability of the manufacturing companies, researcher used single Ordinal least square regression analysis for estimating the unknown parameter in a linear regression model. The systematic flow of this chapter is organized in accordance to the study objectives.

5.1 Discussion of the Major findings

5.1.1 The effect of Accounts Payables period on profitability of iron and steel manufacturing firms in KIBP

Based on result in table 4.5 firms took longer to pay creditors, they gained increment in working capital with higher liabilities to service which decreased earnings between the period 2014 to 2018. Return on equity and return on assets remained negative in the years 2018, while it was only in the year 2015 when one still firm had ROA exceeding 10%. Finally, out of the five years of operation, companies STIL registered an average of 10% in 2017 and 2016 while RS3 obtained 13% and 16% in 2017 and 2015 whereas SRM in five years made a return on Equity of 10% in 2014. Based on the above ratios, it is predicted that the steel industry will keep positively lowering returns to its investors due to the drastic decrease in the payable days and increase in liabilities. This meant that was low inventory turnover preferably due to high prices, high costs of production which lowered profitability and left the steel firms with no option but default meeting its their obligations. Hence resources were not well utilized to generate income.

Further still, figure 4.2 above demonstrates that the steel industry is chaotic, the economic situation is unravelling. In 2018 both ROE and ROA were -32% and -10% while accounts payable days were low as 90 to 400 compared 2017, when APP day increased to 800, both ROE and ROA increased to 24% and 10%. However, the trend was unstable for the entire period. From the graph above, it is still observed that throughout the past 5 years (2014-2018), the steel industry in KIBP experienced negative ROA and ROE due to high level of accounts payables. The model indicate that the R square value of

0.1165 with a zigzag relation with ROE which meant that companies with higher accounts payables days achieved lower ROA and lower ROE. Meaning that delaying or taking longer to settle obligations due to creditors and suppliers of inventory attributed to a decline in profits by 11.65%. This result is in consistent with the study of Addae *et al.* (2013) who found out that there was a strong negative relationship between lengths of the firm's net trading cycle and its profitability. This shows that when the payables of the five manufacturing firms increase, their profitability ratio do not increase even when the average rate of their payables goes up, still the profit they make neither influences nor impacts on firms' profitability among Ugandan manufacturing firms. The results are also in agreement with the studies of Garcia 2007, Muhammad, 2018 and Raheman and Nasr (2007).

The above finding do contravene earlier scholars results which indicated that accounts payable days affected profitability of iron and steel manufacturing companies in KIBP. The accounts payable days positively impacting the profitability (Coefficient: 0.001) though is too low. The relationship is significant as p-value is 0.05. R-square is 0.238, indicating that all things being equal, 23.8% of the variations in profitability is caused by changes in accounts payable days. Even though the results are not highly significant but do make economic sense, since the longer a firm delays its payments the higher level of working capital levels it reserves and uses in order to increase profitability. Thus, the more profitable firms wait longer time to pay their bills. This means that company managers can create value by keeping the levels of accounts payables to a minimum. The results are the same as Ranachandran *et al.* (2009) findings who through regression analysis they found that there is a positive relation between accounts payable period and EBIT, which means profitable firms delay their payables. However, findings differ from Falope and Ajilore (2009) and Kimaru *et al.* (2016) as they found a net operating profitability was affected by average payment period.

Basing on the regression analysis results, the value of R squared, which is the coefficient of determination, in the model summary table is 0.324. This indicates that 32.4 percent of the changes in return on asset are explained by accounts payable period. On the other hand, the remaining 67.6 percent change in return on assets is caused by other factors that are not included in the model. The overall significance of the model in the ANOVA table when measured by F statistics of 5.403 with P-values of 0.0000 suggests that the model fitted well at the 1 percent significance level. The above table further manifest that Accounts payable period has a significant negative effect on firm's profitability as measured by return on assets at the 1 percent significance level. A negative effect of ROA and the

accounts payables deferral period, contradicts the notion that the longer a firm delays its payments, the higher the level of working capital which it uses with the intent of increasing profitability. This difference may exist because less profitable firms take longer to pay their obligations. The regression analysis showed that accounts payable affected profitability of iron and steel firms negatively. Accounts payable period negatively affected profitability can be explained by the benefits of early payment discounts. Such findings were also supported by Shahid (2011) and Raheman & Nasr (2007). The result is also consistent with the prior study of Usama (2012), Raheman & Nasr, (2007) who established that accounts payables period had a significant negative effect the return on assets.

Results in table 4.6 presents the results on the effect of Accounts Payable Period on profitability for four companies for the period 2014-2018. The findings indicate that Accounts Payable Period positively affected profitability (sig at 0.000) though is too low. The association is significant as p-value is less than 0.05, adjusted R-square is 0.015, similarly, iron and steel manufacturing firms delay their payables tend to have higher profits compared to those that settle their payable accounts faster because they tend to have much disposable funds that can be utilized elsewhere. This suggests that, an increase in the number of days accounts payable by 1 day is associated with an increase in profitability. The finding coincides with the views of Raheman and Nasr (2007), Sharma and Kumar (2011) who hold that more profitable firms wait longer to pay their bills. This implies that manufacturing firms do withhold their payment to suppliers so as to take advantage of the cash available for their working capital needs. Similarly, Lazaridis and Tryfonidis (2006) found that there was a significant positive effect between accounts payment period and profitability. This means that profitable firms delay their payments. This is explained by the increased availability of funds caused by the delayed payment of accounts payable. Such funds can thus be used for productive purposes that can increase profitability. The result is similar to some studies that found out that profitability is significantly and positively related to accounts payable days outstanding. Such studies include; Daniel and Ambrose (2013), Tirngo (2013), Ponsian *et al.* (2014) and Mathuva (2010).

Ramachandran and Janakirama (2006), in their analysis of the effect working accounts payables on Earnings before Interest and Taxes (EBIT), indicating that profitable firms delay their payables. In disparity, Falope and Ajilore (2009) found a significant negative effect between net operating profit and the average payment period, implying that if steel companies took short payment period they would be unprofitable. The inverse effect could be explained by the discounts enjoyed by the firms by paying

the suppliers in time, thus reducing the cost of production. However, the policy implication of this is that even though the companies should try to prolong the time of payment as long as possible as they can use the advantage of their suppliers financing their investments until payment has been made, but on the other hand, delaying of such payables can be expensive if a firm is offered a discount for the early payment or is being charged for late payment so manufacturing companies need to take into consideration about the accounts payable days. Steel manufacturing firms took longer period to pay off their debts thus holds more cash in order to enable them to run other functions. This is also advantages to the manufacturing because study has shown that the longer the payment period, the business would be able to meet other short term obligations.

5.1.2 The extent to which Accounts Receivables period affect profitability of iron and steel manufacturing firms in KIBP

The first objective of the study was to establish the effect of accounts receivable period on profitability of the iron and steel manufacturing firms. Results in table 4.7 indicated that in the year 2014 ARP ranged between 74 and 280 days but resulted in ROA and ROE to vary between 1% to 7% and 2% and 10%. The interpretation of Table 4.7 results is that account receivable period across all steel manufacturing firms studied none was able to keep receivables days as low as possible. The debtors were allowed a longer period of approximately more than 2years to pay the debts, which accumulated to working capital management problems. The debtors were too high which accumulated to working capital management problems. This resulted into bad debts being written off and as well as failure to meet daily demands from operations as too much Cash was held by debtors leading to short term liability problems. These steel manufacturing firms collected their receivables late and earned losses as compared to recovering receivables early. These findings are in line with those of previous studies, Hu *et al.* (2011) who conducted a study among various countries such as; Asia, China, Japan, India, Pakistan, Bangladesh, Iran and Korea and established a significant negative effect between accounts receivable period and firms' profitability. In tandem, Raheman and Nasr (2007) also established that most of the firms that invest huge amount of cash in their debtors, thus their profitability was inversely related to accounts receivable collection period. Duru *et al.* (2015) who carried out a study from Belgian found a significant negative effect between the number of days accounts receivable and profitability. Based on the study results, he suggests that managers can increase corporate profitability by reducing the number of day's accounts receivable and inventories.

Results in figure 4.3 showed that steel manufacturing industry's accounts receivables period explain 0.1684 changes in both ROA and ROE. The demand for credit sales predicted to rise in ROA and ROE by 16.8% implying that remaining percentage which is 83.7% explains bad debts accrued in the period 2014 to 2018. The results also concur with Akbar et al, (2013) who analyzed data collected from annual reports of listed manufacturing firms in Ghana. Using panel data methodology and regression analysis, the study found that accounts receivable days affects profitability of manufacturing firms. The study suggests that managers can create value for their shareholders by creating incentives to reduce their accounts receivables to 30 days. Synonymously, Mathuva (2009) studied the effect of accounts receivables on the performance of firms listed at the NSE and the data was taken from 1993–2008. From the study, it was concluded that receivables period affects firms' profitability. This depicts that iron and steel manufacturing firms that are more profitable enjoy less time for the collection of cash from the customers compared to the ones that are less profitable.

Basing on the linear regression analysis results in table 4.8 adjusted R square, value which is the coefficient of determination, in the model was -0.019. This indicates that -1.9 percent of the changes in profitability is explained by ARP. ARP attributed to a financial loss of -1.9% in the model. The findings further indicated that, accounts payables period negatively significantly affected profitability with Adjusted R Square, -0.019 at $p < 0.05$ indicating that companies should be collecting their receivables within a short span of time in order for them to realize increased profits. The result showed that accounts receivable day negatively affected firms profitability. This result is also in agreement with the study of Baker *et al.* (2011), Samiloglu and Demirqunes (2008) and Sharma and Khaliq (2014). This means that as the average rate of receivables goes higher, that the profitability rate also increases accordingly. The only problem here is that if the rate of receivables increases much without a corresponding increase in the liquidity position of the companies, bankruptcy would be experienced thereby temporary or permanent short down may occur. This is because bad debt would occur. This is not consistent with the study by Mathuva (2009) which indicates that, there exists highly significant negative relationship between accounts payable period and profitability. However, accounts receivable collection days negatively affects return on asset but not significantly. This implies that managers to some extent can increase return on assets by reducing receivable collection day. As Mathuva (2010) explained that the sooner customers make payment, the more cash the companies get to reinvest in inventory, consequently they get higher sales prior study findings of Gamze *et al.* (2012), Daniel and

Ambrose (2013), Tirngo Dinku (2013), Shahid Ali (2011), Sharma and Kumar (2011), Ponsian N .*et al.* (2014) and Raheman & Nasr (2007).

From the trend analysis indicated in figure 4.3 on the previous page, accounts receivables period negatively affects profitability with Adjusted R Square -.099 at $p < 0.05$. Receivable period of steel manufacturing firms explains about 9.9% of losses incurred. The shorter the firm's accounts receivable period, the higher will be the profitability and vice versa. This finding also indicates that as the rate by which manufacturing firms receive from their debtors increases, bad debt reduce and enough cash would be available for settlement of firms obligations. The implication of the result is that, the increase or decrease in accounts receivable will significantly and negatively affect profitability of the firms. Accounts receivable have opportunity cost associated with them because company cannot invest this money elsewhere until and unless it collects its receivables. More accounts receivable can raise the profit by increasing the sale but it is also possible that because of high opportunity cost of invested money in accounts receivable and bad debts the effect of this change might turn difficult to realize. On the other hand if a company adopts a policy to have a low level of accounts receivable then it can reduce the profitability by reducing the sales but it can contribute to the profit by reducing the risk of bad debts and by reducing investment in the receivable (Akinyomi, 2014).

Company managers can create value if they keep the number of days accounts receivables to a minimum. This indicates that a higher level of accounts receivables could facilitate a higher profit. This negative effect of accounts receivables on a firm's profitability is found by the majority of studies on working capital. Similar studies like Gill et al. (2010), Lazaridis and Tryfonidis (2006) and Garcia-Teruel and Martinez-Solano (2007) all found a significant negative relation between the number of days accounts receivables and the profitability of a firm. Only one contradicting positive relation is found by Sharma and Kumar (2011), as mentioned earlier, they argue that this is caused by the fact that Indian firms have to grant more trade credit to sustain their competitiveness with their foreign competitors, which have superior product and services.

Based on regression results the coefficient of accounts receivable days is positive but the effect is not statistically significant because its p-value which is 0.96 is definitely larger than 0.05. adjusted R-square is 0.016; means that only 1.6% variation in profitability is caused by changes in accounts receivable days. This makes the results to be insignificant. The findings concur with results of

Ramachandran and Janakirama (2006) as through regression analysis it was found that collection period affects EBIT though the above findings are not statistically significant. Similarly, Ramachandran & Janakiraman (2009) as explained in the literature review of the study of Van (2013) established that accounts receivable collection period affects earnings before interest tax which also concurred with earlier studies such as Sharma and Kumar (2011), who found that accounts receivables period positively affects return on assets. However, the findings are different from the study results of Deloof (2003) and Nobanee and Alfiah (2014) who found significant negative effect between number of days accounts receivable and profitability.

In a nutshell, the most notable of these results is that large manufacturing firms are better off increasing their number of days accounts receivables, to increase customer base which would in turn increase on the profitability of the next year. The reason these firms need to lending aid to their financially constraint customers and by doing that, saving a part of their future sales.

5.1.3 The effect of Inventory period on profitability of profitability of iron and steel manufacturing firms in KIBP

Results in figure 4.4 demonstrated that in 2018 for company STIL, ICP was 1300days when both ROE and ROA were -30% and -10%. When ICP reduced to 1,000days for SA2 both ROE and ROA increased to 0% respectively. From the model summary in figure 4.4, the coefficient of determination value is -1.623, which indicates -162.3% of the variability in the ROA and ROE well explained by the changes in the inventory period. The steel market was volatile to wave nature of the slopes demonstrating unstable trade. Between 2014 and 2018 the inventory conversion period was negative as ROA and ROE remained low between 0% and 10%. The effect of inventory turnover days on ROA and ROE is strong and negatively significant. The implication of this finding is that the inventory holding period are very long. Although maintaining high inventory levels reduced on the cost of possible interruptions due to the cost of supplying the products frequently in the production process and the loss of business due to scarcity of products attributed, productivity output was low. On the other hand maintaining high levels of inventories also helps in reducing the cost of supplying the products frequently which protects the manufacturing companies against regular price fluctuations. Hence the companies can be better off keeping their inventory level to a reasonable minimum. This finding is consistent with Mathuva (2009) who found a significant positive effect between inventory and profitability levels. The scholars

suggested that managers can increase corporate profitability by having longer inventory conversion period.

Regression results in table 4.10 illustrated adjusted R^2 is -.023, $F = .458$, $p < .05$). The results of model indicate that the coefficient of ICC being positively and statistically significant ($\beta = .163$, $p < 0.05$). This implies that when the number of ICC is increased by one unit, causes an increase in profitability by 16.3 percent. The effect of inventory turnover days on profitability is very strong and negatively significant. This means that inventory turnover period significantly and negatively affected profitability of steel manufacturing firms in Kampala and Namanve industrial parks. The inventory turnover period increased as losses increased. The longer the inventory was held to meet the production requirements, the more working capital was tied up. These four steel manufacturing firms thus had forgone the opportunity to invest this capital in profitable ventures. The finding is in agreement with Samiloglu and Demirgunes (2008) who conducted the study to among manufacturing firms in Istanbul Stock Exchange and found that inventory period has a significant negative relation with profitability. The regression results point out a significant negative effect between number of inventory days and profitability which is similar to the previous studies (Raheman and Nasr, 2007; Alipour 2011 Samiloglu and Demirgunes, 2008). Inventories are the core of manufacturing industries and the companies might have to maintain the sufficient inventory level to avoid either the stock-outs or the excess balance. They require raw material and work-in-process for their production and finished goods for sale to customers which affect them to have higher inventory balance and longer inventory period. On the other hand, the excess balance would also cost the company such as loss of benefit from short-term investment, having long outstanding stocks and obsolete inventories. In addition, metal manufacturing companies require the efficient inventory management, supply chain management, procurement and production. Without these systems, the companies may unable to manage their inventory effectively which result in high inventory balance and long inventory period.

Steel manufacturing firms with high inventory period earn low profits as compared to firms with low inventory turnover in days. The results of this research are in line with the previous findings which predicted negative effect between inventory conversion period and profitability. The findings indicate that Inventory conversion period has an inverse effect with firms' profitability i.e. when the inventory days increase the profitability of firm decreases and vice versa. These results conformed with studies by Raheman and Nasr (2007), Deloof (2003), Garcia-Teruel and Martinez-Solano (2007) and Falope

and Ajilore (2009) who found negative effect between inventory period and profitability. The relationship in this study is significant because for every one day decrease of inventory period the increase in profit was 0.12 percent.

Inventory turnover period significantly and negatively affect return on asset. That is, as the inventory turnover period increases, profitability decreases. the longer the inventory is held, the more working capital is tied up, and manufacturing firms thus have less opportunity to invest this capital in profitable ventures. Therefore, the firm's profitability can be enhanced by speeding up the inventory conversion period. This result is analogous with the previous study of Tiringo Dinku (2013), Sharma and Kumar (2011), Ponsian N.et.al. (2014), while, it is differing to the prior study findings of Daniel and Ambrose (2013), Shahid Ali (2011) and Mathuva (2010).

The study showed that stock turnover ratio affects profitability was statistically negative but significant. This result supports the study of Padachi (2006) he found out that high investment in inventories and renewable is associated with lower profitability. This study also is consistent with the study of Falope and Ajilore (2009) which concludes that there is a significant negative effect between average collection period inventory turnover in days and net operating profitability. This means that maintaining high inventory levels reduces the cost of possible interruptions in the production process and the loss of business due to scarcity of products. Maintaining high levels of inventories also helps in reducing the cost of supplying the products and protects the firm against price fluctuations as a result of adverse macroeconomic factors as observed by Blinder and Maccirri (1991). However, the results of this study are inconsistent with the results of the studies conducted by Garcia-Teruel and Martinez-Solano (2007), Raheman and Nasr (2007) and Raheman, Afza, Qayyum, & Bodla (2010) in their respective analysis of the effect of the number of days of inventory on profitability. Mathuva (2009) found out that there was a positive effect between inventory period and firms' profitability. The interpretation comes out as that firms which take more time to keep inventory reduces the cost of disruption in the process of production thus business losses due to insufficiency in the goods which again leads to decreases in operating costs of the firm. Firms keep higher levels of inventory to minimize the risk of possible production stoppages or when a firm has temporarily no access to raw materials.

In a more current explanation of the operating cycle theory, Model, the result addresses the function of any trading unit which is to procure materials, process the same, sell the finished goods and realize money, and utilize the money so received, to procure materials again and to continue the cycle all over again. If enough cash is not realized settlement of firm's obligations may be difficult. This study is not in consistent with the study of Arvit Mallik, Debashish and Debelas (2005). These results lack robustness. This lack of significance using GOP as the dependent variable and the lack of robustness is likely caused by the various different types of organizations among the sample of this study. Forexample a manufacturing firm has a lot more inventories compared to an employment agency.

This study may assume that profitable companies with high sale volume tend to maintain high inventory balance to supply their customers promptly. Findings may suggest that managers can increase corporate profitability by having longer inventory conversion period provided they have proper inventory management systems to avoid over stock of inventory resulting efficient outcome of investment.

5.2 Summary of the major findings

This study was conducted with the objective of Altman's model in predicting corporate financial distress among five manufacturing companies. It is sometimes very difficult to ascertain these factors, which could indicate that a company is experiencing financial difficulties. One of the most commonly used tools by credit managers is financial statements and ratio analysis. Some of the factors that are considered during analysis are profitability ratios. Generally, the study has established that there was a decline in the working capital of the financially distressed companies from the year 2014 to 2018. This indicated that the companies started experiencing reduction in the working capital due to financial difficulties leading to a reduction in the profitability of manufacturing firms.

5.2.1 The effect of Accounts Payables period on profitability of iron and steel manufacturing firms in KIBP

Deriving from the discussion of findings above, average the inventory turns over takes 2138 days with a standard deviation of 5493.6, minimum of 32 days and maximum of 24594 days. This meant that was low inventory turnover preferably due to high prices, high costs of production which lowered profitability and left the steel firms with no option but default meeting its their obligations. Steel manufacturing firms takes longer period to pay off their debts thus holds more cash in order to enable them to run other functions. Although this enabled manufacturing firms to take longer to pay creditors

and suppliers, be able to have cash within themselves increased investments but still unable to meet other short term obligations. Accounts payable period and financial performance is consistent with the view that low profitable firms wait longer period to pay their bills.

The study noted that the effect of Accounts payable financing of manufacturing firms varied from one firm to another. In some manufacturing firms the effect was huge while in others the effect was negligible. Accounts payable period negatively influenced profitability by with R square value of -14.6%. Meaning that delaying or taking longer to settle obligations due to creditors and suppliers of inventory attributed to a decline in profits by 14.6%. Accounts Payable Ratio had significant negative relationship with industries profitability ratio of companies under study, showing that as the value of this variable increases, profitability of the firm has a corresponding decrease. From the findings of the study, there was a negative effect between accounts payables period and profitability. The study also revealed that almost 14.6% of the variance in performance of the manufacturing firms could be explained by the accounts payable as a source of financing. However, the remaining 85.4% (table 4.7) could not be explained by accounts payable variables.

5.2.2 The extent to which Accounts Receivables period affect profitability of iron and steel manufacturing firms in KIBP

The second objective of the study was to assess the effect of accounts receivables period on the profitability of the manufacturing firms. Based on the findings of the study, there was a negative association between receivables period and profitability of the firms studied. Accounts receivable period was averaged 1398 days. This meant that firms waited 1398 days on average to collect cash from credit sales. The debtors were too high which accumulated to working capital management problems. This resulted into bad debts being written off and as well as failure to meet daily demands from operations as too much Cash was held by debtors leading to short term liability problems.

Accounts payables period is negatively correlated with the profitability with Adjusted R Square -.153, at $p < 0.05$. As a consequence, the sales of the company increase, as a result profits may increase. However, bad debts may increase expenses as well. Debt ratio is negatively affects profitability (9,260%). In other words, when the leverage increases, profitability tends to decrease. The only problem here is that if the rate of receivables increases much without a corresponding increase in the

liquidity position of the companies, bankruptcy would be experienced thereby temporary or permanent short down may occur because occurring bad debt.

5.3.3 The effect of Inventory period on profitability of iron and steel manufacturing firms in KIBP

The third objective was to seek the effect of inventory period on the profitability. From the study finding, inventory period was found to have a negative effect with profitability based on the correlation analysis. Likewise, Result of model 2 showed a negative effect between number of days in inventory and firms' performance indicates -14.4% of the variability in the profitability well explained by the changes in the inventory period. Iron and steel manufacturing firms that delay their payments they will earn less profits; the reason behind this is that firms can take the advantage of discounts by paying soon. It implies that an increase in the number of inventory days results in a decrease in profitability. Further, if the inventory takes more days to sell, it will negatively affect profitability. For example, storage and insurance. Cost can be increased and as a result the profitability may decrease. High inventories cause tie up money in the manufacturing firms.

5.3 Conclusions

5.3.1 The effect of Accounts Payables period on profitability of iron and steel manufacturing firms in KIBP

Accounts Payable period is a very important facet of financial management for a continuous growth and survival of manufacturing firms. However, degree at which it was managed was inadequately. The aim of this study was to critically examine the management of accounts payable on corporate profitability. It was found out that Accounts payable (AP) had negative effect with the profitability. Manufacturing firms experienced high level of their account receivables. High level of account payables resulted into high level of indebtedness and delaying to pay off obligations attributed to excessive liabilities over and above the current assets.

In a nutshell the study revealed that accounts receivables period negatively affected profitability suggests that high profitable manufacturing firms will pursue an increase of their accounts receivables in an attempt to increase their cash gap in the cash conversion cycle. Therefore, this makes the importance of overcoming financial distress unquestionable because manufacturing firms have some promising investments with high rate of returns but turned out to be failures and were frustrated out of business. Further, ties up of inventory in the stores leads to the decrease in the profitability. Moreover, large companies get more benefits from the delay in payment to their creditors.

5.3.2 The extent to which Accounts Receivables period affect profitability of iron and steel manufacturing firms in KIBP

Accounts receivable collection period, a measurement for collection policy of the iron and steel manufacturing firms. The debtors were too high which accumulated to working capital management problems. This resulted into bad debts being written off and as well as failure to meet daily demands from operations as too much Cash was held by debtors leading to short term liability problems. Manufacturing firms were not able to collect receivables as soon as possible. This compromised inflow to be received sooner than later.

5.3.3 The effect of Inventory period on profitability of profitability of iron and steel manufacturing firms in KIBP

The negative effect demonstrates that the decrease in inventory conversion period, and account receivable period, measured by return on assets and return on investments had an effect on lowering profitability. Due to low inventory period financially distressed manufacturing companies contemplate shutting down, while many workers are paid meagre wages and others forcefully thrown into unemployment market due to low profitability.

Money that is tied up in inventory or money that customers still owe to the company cannot be used to pay off any of the company's obligations. This makes manufacturing firms encounter trouble paying back creditors in the short term since their current assets do not exceed its current liabilities. The low the return on assets and low return on investment indicates that the manufacturing firms are unable to generate sufficient profits. As the inventory turnover period increased, profitability decreased. the longer the inventory is held, the more working capital is tied up, and firms thus have less opportunity to invest this capital in profitable projects. Therefore, the firm's profitability can be enhanced by speeding up the inventory conversion period.

5.4 Recommendations

The study advocated for the following practical solutions;

5.4.1 The effect of Accounts Payables period on profitability of iron and steel manufacturing firms in KIBP

Account payables decrease profitability. However, this study recommends that even if let payment have its own advantage to increase the profitability of the firm, manufacturing Firms' should pay their debts on time to avoid losing their vendors in the long run.

This study recommends that while there are undoubtedly tax benefits associated with debt, there is an increasing need for constant assessment of the benefits of debts in the capital structure and the adverse effect of financial distress likely to arise as a result of high leverage.

The study recommends that finance managers and financial officers of companies should establish a long-term relationship with their suppliers in order to access trade credit in a more easy and fast way, as increased use of trade credit enhances financial performance of companies through increased profitability.

Board of directors and management of manufacturing firms should manage their trade credits prudently in order to remain profitable and competitive. It is therefore important know how and what working capital structure will influence their performance.

5.4.2 The extent to which Accounts Receivables period affect profitability of iron and steel manufacturing firms in KIBP

The research recommends that some customers delay payments while others may default on them. To overcome this, manufacturing firms must develop an explicit procedure for collecting their receivables. In following its collection procedures, the circumstance of customer's should be kept in mind. Good customers in temporary difficulties should be treated differently from habitual defaulters. Additionally, it is better for marketing personnel to be involved in the debt collection efforts.

Based on the results of the study, managers should focus on ensuring a shorter receivables period in order to reduce the time taken by the creditors in clearing their bills. This will ensure that the business has sufficient cash at its disposal for running routine day to day activities of the entity.

Chief financial officers should have a closer watch on company payables. Credit sales can only be offered after paying their creditors to avoid bankruptcy. Manufacturing companies in Uganda should

adjust their cost of sales so that they can be able to make desirable profits since no company can exist without making profit.

5.4.3 The effect of Inventory period on profitability of iron and steel manufacturing firms in KIBP

Holding inventories, the firm is able to separate the processes of purchasing, producing, and selling. If firms were not willing to hold adequate raw materials and finished goods, purchasing would take place only when immediate production and sales are anticipated. Further, the researcher recommended that manufacturing companies in purchasing departments should create a strong linkage and communications channel so as to minimize operational costs. There is need to reduce on the time frame of the physical flow from receipt of raw material to shipment of finished goods that is inventory management, and by improving the terms on which firm sells goods as well as receipt of cash.

This study further advocates for adoption of Monthly performance evaluation reports. Cost audit should be done continuously, for proper management of accounts payables, accounts receivables and inventory conversion period. This is paramount in reducing lead time, reducing Account Receivable turnover in days, decreasing inventory turnover in days in bid to attain high investment in Current Assets while decreasing Current Liabilities.

The Production managers should redesign mechanisms of ensuring that the period of converting inventory to cash is shortened and adequate for them to ensure efficient and smooth operationalization of the business. In addition this will help in reducing the amount invested in stocks that might lie idle for longer periods of time.

Inventory controllers should be more vigilant in handling of stocks/inventories. Manufacturing firms should make every effort to have enough stocks so that they would not experience stock-outs. In as much as it is good to make sales, it is also not encouraging to sell everything to avoid stock outs.

Government should help bail out the financially distressed firms, such for their product market, prevent dumping of steel products and invest in iron ore processing to enhance raw materials and reduce on foreign exchange ploughed out.

5.5 Suggestions for Further Research

The following are some of the areas that further research may be focused:

The study area can be replicated by examining the effect of profitability on financial distress among iron and steel manufacturing firms in KIBP to assess the inverse relationship between the variables.

Further research should be undertaken to examine the influence of other factors that cannot be measured or quantified such as staff morale and occupational health on the profitability of manufacturing firms.

This study focused on financial distress as predicted by the Altman's Z score model for manufacturing entities in Nakawa and Namanve industrial areas. Therefore, the study did not consider entities in the financial industry such as banks, insurance companies and investment firms. There is therefore need to conduct further research focusing on the banking sector in Uganda and determine whether the results would hold irrespective of the industry being considered.

Further, research should be conducted to substantiate the qualitative factors of the manufacturing firms such as changes in management, product failures, negative publicity, industrial actions, union strikes and their effect on profitability.

Another study can be conducted to examine the effect of corporate governance on financial distress among small and medium sized firms in Uganda to assess the extent to which corporate governance practice does contribute to financial performance.

Another study should be conducted to ascertain the relationship between financial distress and economic distress

Similar study on the impact of other determinants of profitability on the size of the firm and management of companies.

The regression analyses are only a snapshot of the short-term benefits and further research should study the long-term benefits of increasing the number of accounts receivables days by multinational firms.

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APPENDIX I: FINANCIAL DATA SURVEY SHEET FOR COMPANIES

The record survey sheet will be filled in by the researcher himself. All information required in the matrix will be drawn from the published financial reports of the manufacturing firms for the period 2014 to 2018

		Extracts From the Financial Statements							Accounts Payable Period	Accounts Receivable Period (ARP)	Inventory conversion period (ICP)	Cash Conversion	Return on Assets (RoA)	Return On Equity (RoE)	Profitability (Net Profit After Tax)
Years	Co	Creditors	Debtors	Sales	EBIT	Total Assets	Equity	Inventories							
2018	1														
	2														
	3														
	4														
2017	1														
	2														
	3														
	4														
2016	1														
	2														
	3														
	4														
2015	1														
	2														
	3														
	4														
2014	1														
	2														
	3														
	4														
Descriptive	Min														
	Max														
	mean														
	SD														

APPENDIX II: INTERVIEW GUIDE FOR FINANCIAL MANAGERS AND DIRECTORS OF FINANCE

Dear Respondent,

I am Isaac Ngolobe Malaba, a student of Kyambogo University conducting a study on “Financial Distress and Profitability of Manufacturing Firms in Kampala Industrial and Business Park ; I have chosen you to participate in this study. Therefore, it is my request that you kindly fill this questionnaire to facilitate the study. Kindly answer the questions herein as honestly, objectively and accurately as possible. The information will be used for only academic purposes and will be treated with a high degree of privacy and confidentiality. Your cooperation is highly appreciated. The answers you provide will be treated with the uttermost confidentiality and only be used for the objectives of this study

I acknowledge you for sparing time to complete this survey questionnaire.

Thanks yours faithfully.

Section A: Demographic Information

- a) Gender
- b) Age Bracket
- c) Position and period of service
- d) Duration of the firm
- e) No of employees
- f) Duration of Operation, Products and Client base
- g) Installation capacity, Production Capacity and unexploited demand

Section B: Financial Distress and Profitability

- 1) What is the effect of Accounts Payables period on profitability of iron and steel manufacturing firms in KIBP?
- 2) To what extent does Accounts Receivables period affect profitability of iron and steel manufacturing firms in KIBP?
- 3) What is the effect of Inventory period on profitability of profitability of iron and steel manufacturing firms in KIBP?
- 4) What is the effect of financial distress on profitability of iron and steel manufacturing firms in KIBP?
- 5) What strategies can be adopted to overcome profitability challenges among iron and steel manufacturing firms in KIBP?

“THANKS FORE YOUR COOPERATION”

APPENDIX IN: DATA SHEET

									VARIABLES UNDER STUDY AND COMPUTATION FORMULAE						
									Accounts Payable	Accounts Receivable	Inventory		Return on	Return	
									Period (APP)	Period (ARPI)	conversion period (ICP)	Cash Conversion Cycle	Assets (RoA)	On Equity (RoE)	Profitability (Net Profit After Tax)
Years	Company	Debtors	Sales	EBIT	TA	Equity	Inventories	$AP = \frac{\text{Creditors} \times 365}{\text{Sales}}$	$AR = \frac{\text{Debtors} \times 365}{\text{Sales}}$	$ICP = \frac{\text{Inventories} \times 365}{\text{Sales}}$	$C\&C = ARP + ICP - APP$	$RoA = \frac{\text{EBIT} \times 365}{\text{TA}}$	$RoE = \frac{\text{EBIT} \times 365}{\text{Equity}}$		
2018	ST1	7,378,000	1,735,321,000	(126,654,500)	1,209,379,500	604,142,000	406,164,500	402	2	1302	-898	-10.5%	-21.0%	74,172,000	
	SA2	9,066,919,000	64,583,171,000	1,652,857,700	517,080,820,000	28,034,503,000	8,099,852,000	105	51	980	-824	0.3%	5.9%	(5,179,306)	
	RS3	1,254,340,000	6,131,147,000	556,020,000	61,157,650,000	5,891,342,900	603,128,000	739	75	780	34	0.9%	9.4%	7,810,908	
	SR4	5,548,912,973	16,273,531,945	16,997,854	1,226,678,300	547,028,220	4,288,206,186	678	124	659	143	1.4%	3.1%	4,927,793	
2017	ST1	742,420,000	1,805,814,500	108,822,000	1,444,544,500	1,092,455,000	50,072,400,000	806	150	372	584	7.5%	10.0%	87,069,500	
	SA2	9,645,659,000	68,705,502,000	1,758,359,300	55,008,598,000	23,575,121,000	86,168,640,000	547	51	741	-143	3.2%	7.5%	(1,207,254)	
	RS3	1,760,682,300	86,061,181	780,477,000	8,584,526,700	5,974,902,700	84,659,450,000	399	740	285	854	9.1%	13.1%	20,290,635	
	SR4	4,365,269,486	17,118,423,402	19,336,552	14,166,107,464	554,751,100	4,437,955,964	108	93	901	-700	0.1%	3.5%	5,254,170	
2016	ST1	3,382,237,000	501,795,000	368,060,000	65,263,855,000	3,115,857,500	452,819,500	331	246	874	-297	0.6%	11.8%	104,391,000	
	SA2	3,732,443,000	64,746,482,000	1,116,916,800	54,840,567,000	8,859,812,400	8,749,453,000	90	21	800	-689	2.0%	12.6%	237,375	
	RS3	24,991,379	92,662,627	7,427,744	70,704,556	97,108,152	1,347,241,700	256	98	99	255	10.5%	7.6%	46,716,890	
	SR4	2,968,383,250	1,872,000,000	499,000,000	16,291,023,584	5,289,844,000	3,461,605,652	390	579	675	294	3.1%	9.4%	3,098,785	
2015	ST1	307,077,500	441,443,000	33,322,000	6,255,718,600	267,009,000	394,103,500	332	254	905	-319	0.5%	12.5%	116,088,000	
	SA2	6,412,454,000	178,726,486	2,924,629,100	72,638,186,000	36,978,590,500	11,652,056,000	246	1300	340	1206	4.0%	7.9%	(3,292,912)	
	RS3	18,607,951,000	8,683,997,800	7,429,034,000	68,972,220,000	46,752,935,700	10,993,040,000	367	782	289	860	10.8%	15.9%	37,386,782	
	SR4	3,884,239,081	3,034,000,000	642,000,000	10,919,848,153	60,702,826,000	3,001,744,330	313	467	407	373	5.9%	1.1%	37,064,253	
2014	ST1	1,866,424,000	393,348,000	9,378,600	647,884,580	561,333,500	39,550,700,000	473	1732	1051	1154	1.4%	1.7%	98,182,000	
	SA2	74,598,162,000	269,534,025,000	4,752,008,100	217,068,513,000	78,960,211,000	8,222,988,100	106	101	989	-782	2.2%	6.0%	(2,395,217)	
	RS3	1,688,343,200	8,296,011,500	437,750,000	6,697,170,700	5,709,915,320	1,360,840,200	379	74	546	-93	6.5%	7.7%	29,246,291	
	SR4	2,837,425,166	3,702,000,000	656,000,000	9,207,969,852	6,776,607,500	2,884,671,377	324	280	483	121	7.1%	9.7%	3,551,526	

APPENDIX IV

THE SIXTY FIVE MANUFACTURING FIRMS

FINANCIALLY DISTRESSED

Item	8 Sectors	Distressed Entity	Location	Liability	Bank	Asset Value	Employees	Tax Contribution
1	Manufacturing	Steel Rolling Mills Ltd	Jinja	75,900,000,000	Standard Chartered	132,000,000,000	1,000	
2		Steel & Tube	Kampala	66,000,000,000	Standard Chartered	60,000,000,000	2,500	36,000,000,000
		Steel & Tube	Kampala	33,000,000,000	Bank of Africa			
3		Shumuk Aluminum Industries Ltd	Kampala	8,250,000,000	DFCU	66,000,000,000	1,000	8,000,000,000
4		Shumuk Aluminum Industries Ltd	Kampala	6,600,000,000	Baroda			
		Shumuk Aluminum Industries Ltd	Kampala	17,160,000,000	Crane Bank			
5		Roofings Steel Mills	Kampala	201,000,000,000	IFC			
6			Kampala	8,000,000,000	Diamond Trust Bank	15,000,000,000	50	
7	Mining	BM Steels	Kampala-Hoima	66,000,000,000		165,000,000,000	12,000	20,000,000,000
8		Krone Uganda Ltd	Kabale	2,500,000,000	Tropical Bank	???	3,000	???
9		BM Steels	Mbarara	902,000,000	Guaranty Trust Bank, Uganda Development Bank	15,200,000,000	300	600,000,000
10	Hospitality	Colline Hotel	Mukono	2,800,000,000	Baroda	50,000,000,000	200	3,200,000,000
				4,700,000,000	Crane			
				1,500,000,000	Diamond Trust Bank			
				4,900,000,000	Grofin			
11		Garden Hotel	Wakiso	2,400,000,000	Standard Chartered	5,600,000,000	350	
12		Serene Suites	Kampala	3,089,717,400	Uganda Development Bank	39,600,000,000	100	60,000,000
				528,000,000	Diamond Trust Bank			
13		Sojovalo Hotel	Kampala	8,300,000,000	Kenya Commercial Bank	16,500,000,000	100	???
14		Comfort Zone	Kampala	2,920,000,000	Kenya Commercial Bank	8,000,000,000	???	???

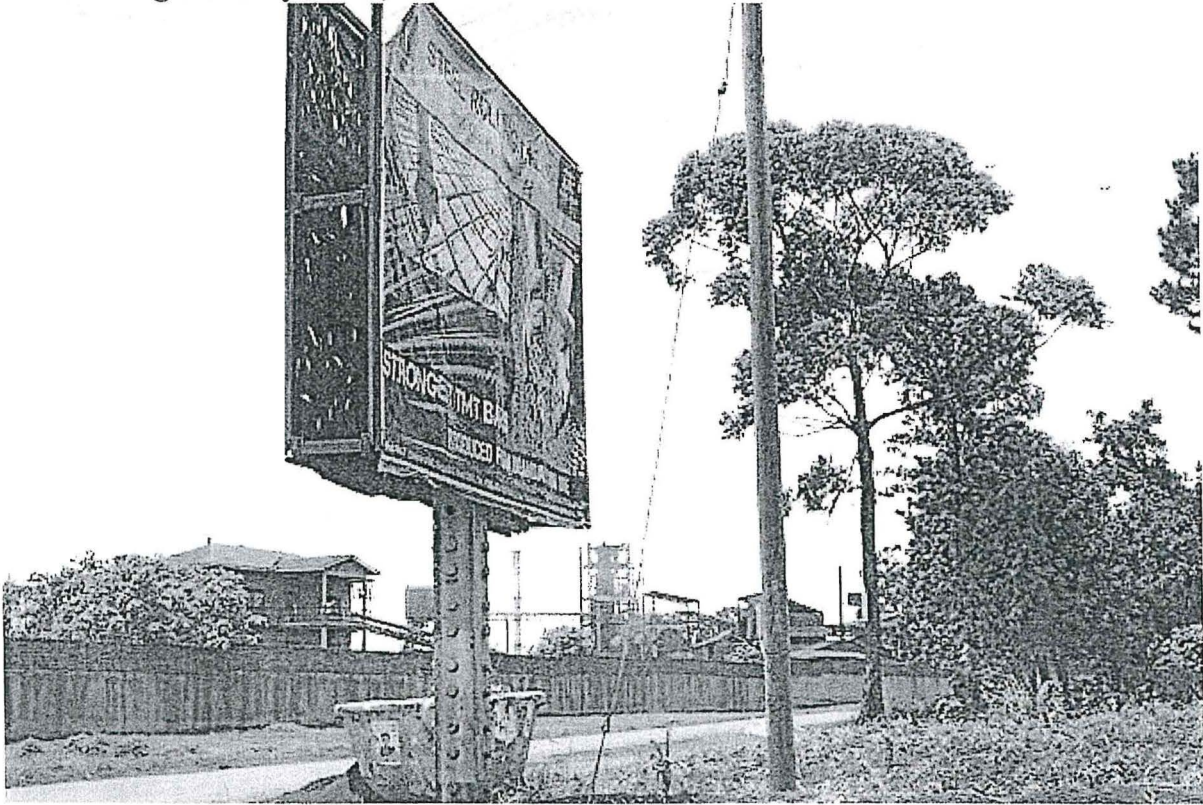
15		Ban Café	Kampala	640,000,000	Bank of Africa	5,000,000,000		
16	Agro-processing	Kabonero Grain Millers Company Ltd	Mubende	390,000,000	Uganda Development Bank	1,500,000,000	120	Exempted
17		Namunkekera Agro Processing Industries Ltd	Nakaseke	4,800,000,000	Uganda Development Bank	7,700,000,000	500	Exempted
		Job Coffee	Kampala	21,300,000,000	Stanbic	1,500,000,000	230	
					Standard Chartered Bank	19,500,000,000		
18		Horay Investment Holdings Aminah)		120,000,000,000	Crane Bank		10,000	
19	Real Estate	Kalwana Emmanuel	Wakiso	4,300,000,000	Standard Chartered Bank	12,000,000,000		
		Simba Group	Kampala	201,000,000,000	Crane Bank & Others			
20		MS Clay Products	Kampala	5,000,000,000	DFCU Bank	13,200,000,000		
21		Future Land	Kampala	26,600,000,000		50,000,000,000		
22		Mulinde Robert	Kampala	480,000,000		3,500,000,000		
23		MFK Corporation Limited	Mpigi	10,020,549,014	Diamond Trust Bank	16,000,000,000		
24		MayFlower Investments	Kampala	12,540,000,000	Housing Finance Bank	22,450,000,000		
25		Mulu Company Ltd		10,000,000,000	Eco Bank	40,000,000,000	25	600,000,000
				1,320,000,000	Grofin			
26		Cissy Christine Kajumba	Wakiso	422,000,000	Housing Finance	1,800,000,000		
27		Nakalule Shamillah	Wakiso	306,000,000	Standard Chartered	2,000,000,000		
28		Concern Global Markets		11,100,000,000		20,000,000,000		
		Grapes Construction	Kampala	100,000,000,000	Stanbic	165,000,000,000		
		Ham Enterprises	Kampala	33,000,000,000	DTB	100,000,000,000		
				5,000,000,000	Orient			
29	Trading	MS Frank Ssonko Ltd	Kampala	3,500,000,000	Crane Bank	9,900,000,000		
30		Barigye and Company	Kampala	396,000,000		1,200,000,000		

31		JJ Printers	Kampala	1,000,000,000		2,300,000,000		
32		Viva General Enterprises	Kampala	9,100,000,000	Standard Chartered	12,000,000,000		
33		Sebagala & Sons	Kampala	8,150,000,000		15,000,000,000		
34		Senana U Ltd	Kampala	27,100,000,000	Stanbic Bank	70,000,000,000		
35		Nsamba Trading Company		1,200,000,000	Diamond Trust Bank			1,200,000,000
				850,000,000	Equity Bank			
				850,000,000	Eco Bank			
				825,000,000	Grofin Bank			
36		AZK Enterprises	Kampala	1,250,000,000	Crane Bank	2,500,000,000	100	
37		Future Land	Kampala	26,600,000,000	Standard Chartered	50,000,000,000		
38		Kaweesi Remmy	Kampala	800,000,000		7,000,000,000		
39		Maja & Musoke	Kampala	1,052,000,000				
40		Willex U Ltd	Kampala			8,250,000,000		
41		Muramuzi Bartholomew	Kampala	2,160,000,000				
42		Mpindi Robert	Kampala	2,920,000,000		8,000,000,000		
43		Joseph Lutalo Bossa	Kampala	3,500,000,000		5,600,000,000		
44		Zziwa Ahmed	Kampala	10,000,000,000		20,000,000,000		
45		Ssali Charles	Kampala	2,400,000,000		5,000,000,000		
46		Jingo Ismail	Kampala	90,000,000		100,000,000		
47		Nassali Madina	Kampala	165,000,000		270,000,000		
48		Steven Mukasa	Kampala	10,000,000,000		40,000,000,000		
49		Seaba Agencies	Kampala	400,000,000		4,000,000,000		
50		Barigye Kiremire		396,000,000		1,200,000,000		
51		Ephraim Ntaganda	Kampala	14,850,000,000		49,500,000,000		
52		Eriku Jackson	Arua	570,000,000		2,600,000,000		
		Desh Kagonyera	Kampala	1,800,000,000	DTB	5,000,000,000		
53	Entertainment	Club Silk	Kampala	5,000,000,000	Crane Bank	15,000,000,000		
54	Education	Frank Bartholomew		690,000,000	Baroda Bank			
55		Molly and Paul	Kampala	653,000,000	Cairo International Bank			
56				900,000,000	Stanbic Bank			

57				250,000,000	Opportunity Bank			
58		Lira Integrated Schools	Lira	1,000,000,000	DFCU	5,500,000,000		
59		Adroite Kampala SS	Kampala	1,200,000,000				
60	Cooperatives	West Acholi Cooperative Union	Acholi	1,700,000,000	DFCU Bank	5,300,000,000		
61		Sebei Cooperative	Sebei	500,000,000	Crane Bank	9,000,000,000		
				300,000,000	Post Bank			
62		UTODA Awakula Enume	Kampala	2,450,000,000	MSCL	9,000,000,000		
				960,000,000	Equity Bank			
63	Broadcasting	TV Africa Ltd	Kampala	600,000,000	Housing Finance, Centenary Bank	8,000,000,000		
64	Oil & Gas		Kampala	70,000,000,000	Several	330,000,000,000		
65	Transport	Ataco Freight Services Ltd	Kampala	1,800,000,000	Stanbic Bank	2,970,000,000	61	19,200,000
		TOTAL		1,304,595,266,414		1,450,270,000,000		69,660,000,000

DAILY MONITOR MONDAY AUGUST 29 2016

Steel Rolling Mills lays off 2,500 workers



The Steel Rolling Mills factory in Jinja. FILE PHOTO

Management says the breakdown of production machines at the factory has caused the staff crisis.

By NAKATO TAUS

Some 2,500 workers of Steel Rolling Mills have been laid off in the last two years, a senior manager at the manufacturing plant has said. During a press conference in Masese, Jinja District, the factory's general manager, Mr Ismail Nasifu, said since February 2014 when the production machine broke down, the factory's operation has been irregular, leaving the management with no choice but to lay off some of workers.

"From January to date, 1,500 workers have been terminated. Before that, we laid off 1,000 employees," Mr Nasifu said.

"More 200 including administrators are likely to be sacked because the machine is now completely down. This is worrying, yet our choices are limited. Without the having the machine up and running, we cannot do much," he added.

Steel Rolling Mills was among the list of about 60 companies and individuals seeking a financial bailout totalling to Shs1.3 trillion from the government.

The company is also battling to pay off a Shs50 billion loan it acquired from Standard Chartered Bank in 2014, which it used to replenish its machines. Consequently, the firm was placed under receivership to allow the bank recover its loans.

The properties that are on the verge of being sold off include LVR 1618 folio 17 plot Bidco Road, Masese Jinja, LRV 33897 Folio 6 plot 92A Fifth Street, Industrial Area Kampala, Block 449 plots 3 to Busiro County. Mr Nasifu appealed for government intervention so that the factory can revive its glory and contribute immensely to the national coffers as it used to do before. **Plea**

"We would want to see government intervention before we close shop altogether," Mr Nasifu said.

The company was founded in 1987 and is a member of Alam Group.

Mr Abid Alam, the chairman of Alam Group of Companies, told journalists that the company was not asking for free money but a change in government policies that have distressed several companies across the country. "We have been here for more than 31 years and our contribution to the economy is more than the help we are asking for," he said.

Earlier, the Uganda Manufacturers Association said the economy risks slipping into recession if nothing is done to bailout the distressed companies.

argued the case against Steel Rolling Mills, yesterday welcomed the decision of the court before saying they are yet to sell off the property and recover the loans in question. On January 23, 2014 and December 29, 2014, the bank offered Steel Rolling Mills two amalgamated loan facilities amounting to about Shs18 billion and \$10 million respectively.

The loans in question were to finance the purchase of machinery and equipment for the Sponge Iron Plant to be fixed into the company's factory.

According to the court records that Daily Monitor has seen, the two loan facilities were to subsist for the periods of up to 96 months so as to enable Steel Rolling Mills generate funds from the operation of the factory in order to repay the money.

Loan payment

As a way of paying back the loan, Steel Rolling Mills on May 26, 2015 and June 30, 2015 made part payment to the bank of over Shs2 billion and over \$7 million.

However, the respondent (the bank) issued a notice recalling the entire outstanding loan in the amount of over Shs18 billion and over \$10 million claiming that the debenture is immediately enforced in total contravention of the Mortgaged Act.

Court records further indicate that Nyumba Ya Chuma and Scrap Processors, who are the owners of some of the mortgaged properties, were not notified by the bank about the sudden recall of the entire outstanding loan.

Steel Rolling Mills, through its lawyers of Muwema & Co Advocates, had argued that it was premature and unreasonable and defeats the intention of the parties for the bank to recall the total outstanding loan within 45 days and yet the initial loan period of 96 months had not expired.

The advocates had also argued that the balance of convenience favoured their clients because the bank could recover the said loan after the termination of the main suit, hence the need to issue a temporary injunction that the court rejected.

Android

Employment

Investment

Ugandan phone on sale 2019

By Wilson Manishimwe

The manufacture of smartphones named "LifeMobile" is to start in the first quarter of 2019 and investment is to be undertaken by the National Enterprise Corporation (NEC), the commercial arm of Uganda People's Defense Forces (UPDF), in partnership with CTI Africa, a tech-firm.

Evelyn Anite, the state minister for investment, yesterday revealed that the CTI partnership was recommended by President Yoweri Museveni.

The plant outlet will be located at NEC premises on 6th Street in Industrial Area, Kampala.

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Statistics

Information from Uganda Revenue Authority (URA) indicates that Uganda imported phones worth over sh125b in the first quarter of 2018 and data shows that phone imports have been on the rise.

"On average, we have about seven million Ugandans with mobile phones and a big percentage owns smartphones whose minimum cost is sh200,000 (each). Once we start manufacturing phones, that money will be channelled to other sectors of the economy," Anite said.

Launching the Mbale Industrial Park earlier this year, Anite said the launch of the park was a defined strategy to develop Uganda's manufacturing industry. The same message has been promoted by President Museveni, who has launched several factories ranging from makers of electronics, food processors, manufacturers of fertilisers and ceramics.



Former National Planning Authority chairman Kisamba Mugerwa, Maj. Gen. Mugira, Landau and Anite during the press conference in Bugolobi, Kampala yesterday. Photo by Wilson Manishimwe

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Asked how she would protect the product from competition from

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4GB ROM/512RAM; has a long-lasting battery and has four-inch HD resolution screen.

Landau added that the phones will be produced with specialised inbuilt applications for healthcare, mobile banking, insurance, microfinance and education, tailored to improve people's lives, through several transactions made using it.

New Vision understands that this is the first time the firm is taking up phone manufacturing.

Maj. Gen. James Mugira, the NEC managing director, said the major difference brought by LifeMobile is the in-built apps that will ensure utilisation of technology.

Witness tips on forests protection

By Andante Okanya and Edward Anyoli

The National Forestry Authority (NFA) is incapable of protecting forests from land grabbers, the agency's former legal manager has told the land probe commission.

Yesterday, Ruth Kisakyie testified at the probe public hearing in Kampala and stressed that NFA urgently needs adequate human resource and funding, to enable it execute its statutory mandate.

The commission is chaired by Justice Catherine Bamugemereire. Part of the commission's mandate is to scrutinise the effectiveness of relevant bodies in the reservation of wetlands, forests, road reserves, and national parks, among other gazetted spaces.

Kisakyie was prompted to give the proposal when lead counsel Ebert Byenkyia asked her to recommend measures to equip NFA.

"Your own assessment shows NFA is not working. Would it be a good idea to merge NFA and UWA (Uganda Wildlife Authority)?" Byenkyia asked.

Kisakyie responded: "I do not think the two should be merged. We should look at how to empower NFA. The staff is low, and the field staff are not adequately facilitated. They do not have bikes to patrol forests."

She observed that NFA manages 503 forest reserves, while UW manages five.

"We once had 200 cases to batt in court. In my report, I advocate recruitment of more lawyers for NFA," Kisakyie said.

Asked by counsel Byenkyie whether the authority had one time explored the option of external lawyers to plug the inadequacy gap, Kisakyie replied that she proposed the idea but the board did not consider it.

Namanve Industrial Park attracts more investment

By Edward Kanyiwa

President Yoweri Museveni is expected to commission six industries in the Namanve industrial park today, bringing the number of active operators in the park to 35.

According to the Uganda Investment Authority (UIA), Toyota Uganda, Orion Transformers, Alfasan Limited, Steel and Tube Industries, Interior Technologies and Luuka Plastics are some of the biggest operators in the industrial park.

"These operators are expected to add value to locally available raw materials thus boosting the agricultural and mineral sectors," Basil Ajar, the acting UIA executive director, said.

Ajar said the park offers direct employment to 3,000 people, with 17,000 others employed by 197 projects under construction.

The Kampala Industrial and Business Park (KIBP), commonly known as Namanve industrial park, was established in 1997 by an Act of Parliament and sits on 2,200 acres.

Ajar said the land in Namanve had been allocated to 290 prospective investors, 35 of whom now have fully-fledged operations there.

Yesterday, he warned that UIA would not give extensions to projects that had not taken off within the stipulated period.

"If they take long to set up, we will have no choice but to cancel their allocation and give it to other prospective and serious investors because what we want is activity in line with the stipulated agreement," he said.

Stella Kanyike, the UIA publicist, said the regulator is currently developing three industrial and business parks in the greater Kampala metropolitan area,

including KIBP, Luzira Industrial and Business Park and Bweyogerere Industrial Estate in Wakiso district.

She said most of the investors were domestic, accounting for 66.2% of total allocations. "A total 192 are local and 98 are foreign investors' allocations," she said.

Over the years, UIA has been seeking funds to develop industrial parks across the country to boost industrialisation. Last year, a \$151m (sh545b) loan from the Exim Bank of China was requested to furnish industrial parks with roads, water and electricity.

Kanyike said Namanve, whose total investment is expected to hit \$3.6b (sh13.5 trillion) is likely to generate at least sh500b annually in taxes when fully operational.

President Museveni has this year launched several industrial parks spread in different regions of the country.



Workers at one of the factories in Namanve Industrial Area

THE PLAN

All factories would be installed with CCTV cameras and centrally-commanded cameras be set up around premises

By Vision Reporter

President Yoweri Museveni has instituted an operation to strengthen security around all industrial parks and factories in the country.

"I have ordered for an 'Army operation' in all industrial parks. All security organs, including local security guards, will generally be treated like soldiers. If one loses a gun, he/she will have to face the Court Martial. And the penalty is either a seven-year imprisonment or execution," he said.

He said all factories would be installed with CCTV cameras pending the installation of centrally-commanded cameras around premises.

The President and Commander-in-Chief of armed forces issued the fresh orders yesterday while addressing over 120 Chinese investors at State House Entebbe.

Several security chiefs attended the meeting, including the Chief of the Defence Forces (CDF), Gen. David Muhoozi, deputy CDF Lt Gen Wilson Mbadi, Inspector General of Police (IGP), Martin Okoth Ochola, and deputy IGP Brig. Muzeyi Sabiti. The Chinese team was led by China's ambassador to Uganda, Zheng Zhuqiang.

According to a release issued last evening, the interaction was to "calm them (investors) over the scare prompted by the spate of robberies and thuggery attacks in the localities of their investments and factories, notably around Kampala industrial parks, Mukono and Luwero districts".

Good security record

The State House release indicates that President Museveni re-assured the Chinese investors that as some of them have lived in Uganda for a long time and appreciate that the country has been peaceful.

He told them that the country would remain peaceful and that they should not worry about the recent wave of colluded robberies and thuggery attacks where money has been stolen.

"This is a simple problem to solve. In the past, we used to have problems like terrorism, rebel invasion in the Rwenzoris, insurgency in northern



Some of the Chinese investors listening to Museveni during a meeting at State House Entebbe yesterday. PPU photo

Security: Museveni orders on industrial parks, factories

of 1.3 billion people and the African population of nearly 2.5 billion people, will be good prosperity in partnership in the future," he stressed.

More measures

This is the second time this week that Museveni is assuring investors of protection.

On Tuesday, while meeting Ambassador Zheng Zhuqiang, the President reiterated the Government's commitment to protect businesses and their proprietors.

At the meeting, the President directed Uganda People's Defence Forces (UPDF) and the Police to form an operational security committee that would seek a joint co-ordination with the Chinese community.

He also ordered that there should be area-to-area security operations with the deployment of at least 12 armed security personnel and vehicles in industrial parks.

For isolated factories, the President recommended the deployment of four policemen. He warned the Police against corrupt individuals, adding that culprits should be removed such that the Government can employ other young people who are looking for jobs.

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ASSIGNED

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CDF David Muhoozi



Ambassador Zheng Zhuqiang

Uganda and Karimojong cattle rustling. This is a problem that requires to be handled with technical devices to see, hear and smell, speed of getting to the scene of crime and quick communication that can help to yield quick results," he said.

The President, who cautioned the investors not to keep money in the factories' premises, added that if the Police can be vigilant and react to

the criminals, thieves will be at a disadvantage.

"My suspicion is that there must have been internal collusion in these related incidences," he said. He, therefore, advised that if it so happens, the investors ought to deal with the nearest Police immediately using the quickest possible means of communication.

Museveni, who thanked the

Chinese investors for choosing to invest in Uganda, further assured the investors who have fallen prey to robbery of their cash that the Police were hunting for the criminals using all methods of detection.

"Prosperity means two people. The producer and buyer of goods and services, and becomes progressive and if the two key elements are big in number. The Chinese population

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"If they take long to set up, we will have no choice but to cancel their allocation and give it to other prospective and serious investors because what we want is activity in line with the stipulated agreement," he said.

Stella Kanyike, the UIA publicist, said the regulator is currently developing three industrial and business parks in the greater Kampala metropolitan area,

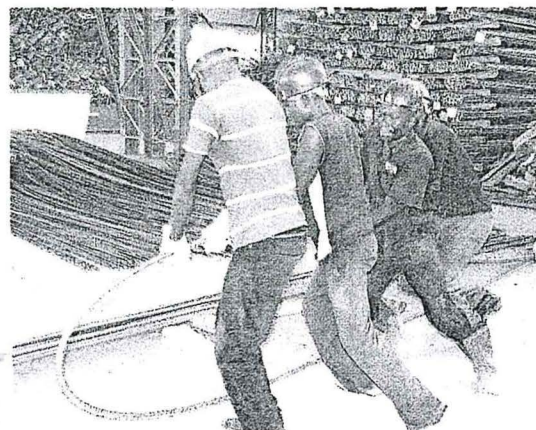
including KIBP, Luzira Industrial and Business Park and Bwegyogerere Industrial Estate in Wakiso district.

She said most of the investors were domestic, accounting for 66.2% of total allocations. "A total 192 are local and 98 are foreign investors' allocations," she said.

Over the years, UIA has been seeking funds to develop industrial parks across the country to boost industrialisation. Last year, a \$151m (sh545b) loan from the Exim Bank of China was requested to furnish industrial parks with roads, water and electricity.

Kanyike said Namanve, whose total investment is expected to hit \$3.6b (sh13.5 trillion) is likely to generate at least sh500b annually in taxes when fully operational.

President Museveni has this year launched several industrial parks spread in different regions of the country.



Workers at one of the factories in Namanve Industrial Area

IPOD wants more time before dialogue

By Nelson Kiva and Paul Kivuuwa

Uncertainty hangs over the proposed national dialogue as key stakeholders raise questions regarding the agenda.

Just a day after the Democratic Party (DP) announced that it was opting out of the dialogue on Tuesday, the Inter-Party Organisation for Dialogue (IPOD) yesterday indicated that member parties were yet to reach consensus on the matter.

Uganda People's Congress (UPC) which holds the rotational leadership of IPOD, a forum for dialogue for all political parties with representatives in Parliament, questioned the motive of the Inter-Religious Council of Uganda (IRCU) and Elders Forum for driving the issue of national dialogue hastily without due consultations of stakeholders.

Addressing journalists at the party headquarters located at Uganda House, UPC party spokesperson, Michael Osinde, said IPOD and the National Consultative Forum (NCF) should be consulted before setting the agenda for national dialogue.

"NCF, which is chaired by Prime Minister, Dr Ruhakana Rugunda, is slated to mobilise all political parties, security agencies and the diaspora towards the agenda of national dialogue."

IPOD is set to convene next week and in consensus on national dialogue.

IPOD is currently constituted of National Resistance Movement (NRM), Forum for Democratic Change (FDC), DP, UPC and Justice Forum.

Opposition political parties and recently issued a joint statement at Protea Hotel in Kampala committing to national dialogue.

By Moses Mulondo

The Government will next year recruit an additional 1,968 extension workers to improve the provision of extension services to farmers in the country.

The Government believes having more extension workers to guide farmers on best farming practices including modern agriculture technologies, would boost the volume of production in the sector.

In a presentation made yesterday by the agriculture ministry policy analyst, John Okiror, at the finance ministry conference hall, some of the critical areas the ministry has prioritised include a proposal to recruit 1,968 extension workers in the financial year 2019/2020.

The ministry said the additional recruitment would enable them to achieve the target of having 5,000 extension workers in the country.

According to the matrix the agriculture ministry submitted to the finance ministry, the recruitment of the extension workers and improved support to facilitate them to effectively do their work would require an additional budget of sh81b.

The extension workers would also be trained in modern agriculture technologies, methods and upgrade regional agriculture research centres to act as learning centres.

Meanwhile, farmers from across the country yesterday told the finance ministry that the extension workers were hard to get in the areas assigned to them to offer services.

The delegation of farmers who had just returned from Israel, told the Secretary to the Treasury, Keith Muhakanizi, that they were impressed by the role played by extension workers in Israel in

Govt to recruit more extension workers



Muhakanizi (centre) talking while Mugambe (right) and tourism ministry permanent secretary Doreen Katusilme, look on during the Budget Conference yesterday. Photo by Kennedy Oryema

Muhakanizi said they had received communication from the Executive that all entities should go on with the budgeting process following the status quo.

BETWEEN THE LINES

■ Muhakanizi warned accounting officers who neglect their duties that they would be punished. Accounting officers were said not to be supervising extension workers.

The budget director, Kenneth Mugambe, appealed to the sectors to ensure that while identifying their priorities for the 2019/2020 financial year, they should choose interventions that will improve the social-economic welfare of Ugandans.

The 2019/2020 financial year, whose budget the Government is preparing, will be the last year towards the realisation of middle income status with a per capita of \$1,013 and poverty rate of 14%, which the Government promised that the country would achieve by 2020. The country's per capita income is currently at \$770 and the poverty rate has increased from 19% to 21.4%.

guiding farmers on best farming practices. The farmers met Muhakanizi before the budget consultative meeting.

"The reports from the farmers who have visited me were shocking. Whereas we have been allocating billions of money for extension services, it appears there is no work on the ground. This is unacceptable," Muhakanizi said while addressing technocrats from various ministries that included agriculture, trade, tourism, finance, health and environment.

Muhakanizi, who is mandated with supervising all accounting officers, expressed disappointment with accounting officers who neglect their duties.

He said as the Government focused on driving the country to the middle income status, they would be strict on accounting officers who are not producing the required results.

On plans to have some entities phased out as part of a Cabinet decision to restructure the Government and eliminate wastage,



PUBLIC NOTICE

ELECTRICITY CONNECTIONS POLICY

The Government of Uganda (GOU) launched the Electricity Connections Policy on 14th August 2018. The Policy aims at increasing electricity access in Uganda from 21% to 60% by 2027. The Policy will also meet the connection targets stipulated in the Government's Development Plans i.e. the Second National Development Plan (NDP II) target of 30% National coverage by 2020 and the Second Rural Electrification Strategy and Plan (RESP II) target of 26% Rural access by 2022. The policy will be revised to enable achievement of the 80% Vision 2040 connection target and thereafter universal coverage.

The purpose of this notice, therefore, is to inform the **General Public** that with **Effect from 1st November 2018, ALL Customers** that require a **No-Pole or one Pole service** electricity connection will be **CONNECTED FOR FREE**. Customers will be required to **PAY ONLY AN INSPECTION FEE**.

ALL ELECTRICITY UTILITY COMPANIES ARE ADVISED AND DIRECTED TO TAKE NOTE AND IMPLEMENT CONNECTIONS IN LINE WITH THIS ELECTRICITY CONNECTIONS POLICY.

Qualification/ Steps for free connection;

1. Your house, small business premises or property is within 90 meters from a low voltage electricity pole.
2. Wire your house, small business premises or property with the help of a Certified Electrician who will issue you a Wiring Certificate upon completion.
3. Apply for connection at your electricity utility company, pay the inspection fee and your house, small business premises or property will be inspected. The inspection fee ranges between UGX 20,000 to UGX 41,300 depending on the electricity utility company.
4. If your house, small business premises or property passes the inspection, you will be connected for free.

For further information on this matter, please contact the Electricity Regulatory Authority (ERA) at ERA House, Plot 15 Shimon Road, Nakasero, P.O. Box 10332, Kampala Tel +256414341852 and the Rural Electrification Agency REA, at Plot 10 Windsor Loop, Kololo, 2nd Floor, House of Hope, P.O. Box 7317, Kampala Tel +256312318100

APPENDIX VII

ROADMAP TO ATTAINING MIDDLE INCOME STATUS FOR UGANDA

By National Planning Authority

1) What is middle income?

According to the World Bank, middle-income countries are nations with annual per-capita gross national income ranging between USD 1,025 and USD12,615. Per capita-income status is used by the World Bank to classify economies for operational and analytical purposes. Per-capita gross national income is used for classification of nations because of its simplicity and ease of international comparison across countries for the determination of economic capacity and progress of nations. The World Bank classifies every economy as low, middle or high income. Low-income and middle-income economies are collectively referred to as emerging economies.

2) What does it mean for an ordinary Ugandan?

Uganda's target is to attain a lower middle income status by 2020 with an annual per capita income of USD 1,033 according to the NDPII. This means that all Ugandans including children who are not working on average should each be earning at least USD 1,033 (UGX3.5million) annually and USD 86 (UGX 290,000) monthly.

However, using averages can be misleading for Ugandans across the country. Because we could run into a danger of having a middle income status with a high proportion of the population still trapped in poverty like the way it is in countries like Angola and Equatorial Guinea.

The middle income goal for Uganda should be anchored at household level focusing on the household earnings, which would translate into inclusive growth. The implication of achieving this inclusive middle income country would require **each household to earn a total annual income in proportion to its size**. For example if a household has 10 members, then we would expect a total annual income of (10 people X 1,033) USD 10,330 (UGX 35million), representing monthly income of UGX2.9million from such a household.

Meaning that

This would mean that; there will be enough food for everybody, longer years of schooling for children, fewer children dying from common diseases, having a manageable household size, absence of malnutrition, people being able to read and write etc.,. In addition, a middle income status would mean our country having no people living in abject poverty, though with pockets of insecure non poor, no wide disparities in income distribution across the country. Currently we have an average poverty level of 19.7% countrywide.

3) Can Uganda attain this middle Income Status?

This is achievable, provided the NDPII is implemented as laid out to the dot.

4) How does the NDPII recommend this to be achieved?

The NDPII identifies five lead sectors that if well focused, can propel this country to middle income status. These are: Agriculture; Tourism, minerals, oil and gas; Human Capital development and infrastructure development. To maintain and improve competitiveness, Uganda must strive to increase productivity throughout its economy especially in the key growth sectors along their entire value chain. Increased productivity with an outward orientation across these sectors would propel growth by 2020.

Overall, attaining middle income status requires success at three levels of policy making, planning and implementation. Currently, the country is performing better with policy formulation improvement have been registered in planning but significant challenge remains at implementation.

“As such, to fast track the move towards middle income status we need to identify key performance and results points both in the private and government sector. These should be focused, supported, monitored and strengthened to fast track the move towards middle income,” says NPA.

The political commitment, ideology and accountability towards attaining the middle income are important. This as evidenced from international lessons is the foundation upon which a sustained development drive is based on. This is because the process of transformation to middle income requires sacrifices and accountability towards the goal.

The NPA says: “This can only be achieved by strong political commitment to drive the country towards the goal.”

To fully commit ourselves, H.E the president strongly guided the new cabinet with 23 strategic directives that are in line with the second National Development Plan that if we achieve deliver us to this target.

The NRM government is determined to bring more homesteads into the money economy (which currently stands only 32 per cent of the homesteads).

The Government is working on converting the 68% of homesteads from subsistence to commercial agriculture. Government is embarking on the programme of distributing coffee, fruits and/or tea seedlings to all the homesteads with land of two acres and above.

In regards to coffee, a tissue culture laboratory is going to be built at Kituuza to enable multiplication of high quality disease-free seedlings industrially and quickly.

With Uganda promoting inclusive growth, attaining the middle income status 2020 is achievable. At an average above 5.5% per year, Uganda’s growth rate is impressive by all standards. Poverty levels have declined significantly, not only in urban areas, but also to some extent within the rural areas.

In addition, all crops and products that are not consumed fresh must be processed to enable us earn more money and also create jobs.

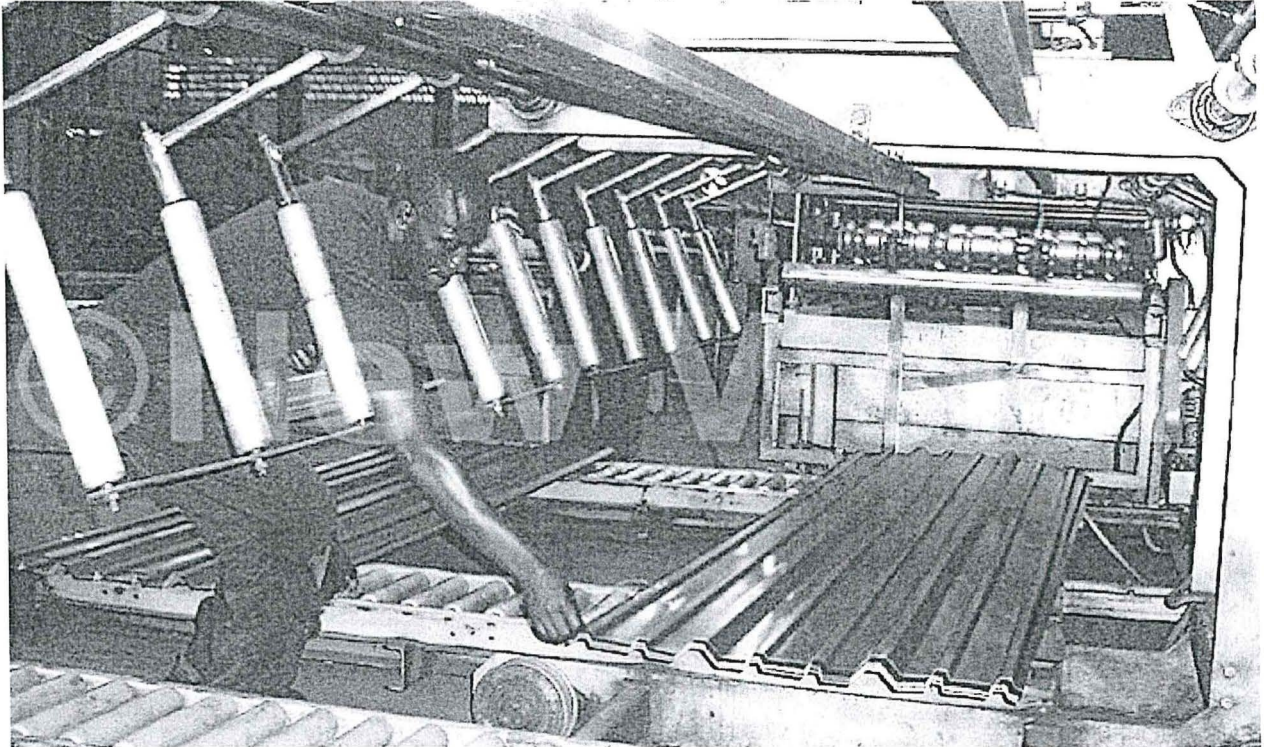
APPENDIX Viii: TAX EVASION BY STEEL FIRM

MPs call for investigation into steel sector

By Edward Kayiwa

Added 7th April 2017 01:50 PM

A number of steel companies are reportedly evading billions in tax



PIC: A machine operator in a steel milling factory. (File photo)

Bukooli county Member of Parliament, Gaster Mugoya, has moved a motion in parliament to investigate allegation of tax evasion in the steel sector.

According to Mugoya, a number of steel companies are evading billions in tax through non-invoicing of local and export sales, partial invoicing, as well as misclassification and under declaration of imported steel products. He moved the motion on March 15, 2017.

In a document *New Vision* has seen, Mugoya says the steel companies are also depriving the national treasury through under declaration of PAYE and what he called invisible financial transactions.

“Whereas the steel sector has potential to greatly contribute to the development of the country, this is not the case because of chronic and systematic tax evasion prevailing in the sector,” Mugoya said.

Uganda currently has 12 registered steel mills with a combined production capacity of five hundred thousand tonnes per annum, and more than twenty three steel manufacturers and importers.

Data from the ministry of energy shows the country’s reserves boast of more than 200 million tonnes of hematite iron ore and 60 million tonnes of magnetite iron ore in the West and South

APPENDIX VIII

Eastern

parts.

Mukoli says most of the steel companies are also evading tax through concealed transactions and documents, undocumented supply of finished steel products as payment for scrap and non-invoicing of scrap deliveries.

Under the Uganda income tax Act, the value added tax Act, Excise Tariff Act and the East Africa Management Act, 2004, all persons operating businesses in Uganda are obligated to pay tax.

Section 3 of the Uganda Revenue Authority Act also mandates the tax body to assess and collect taxes, as well as account for all revenues to which the tax laws apply.

Previously, government has initiated a number of laws aimed at protecting the domestic iron and steel mills against unfair competition from cheaper imported products, especially from COMESA.

Dealers and manufacturers however say their biggest competition consists of imports from China, Egypt and Spain, which flood the market and chock local manufacturers on losses.

In its latest review of the country's mineral sector, the ministry of energy and mineral development said Uganda has a combined iron ore deposit of close to 300 million tonnes.

According to experts, 80% of works required to realize Uganda's vision 2040 will be in the construction sector, and take off of substantial projects has already happened.

In a telephone interview with Jim Kabeho, the Uganda iron and Steel Manufacturers' Association (UISM) secretary, he said the association received a letter from president Museveni and consequently met with officials from URA last week.

He said the president's letter was complaining about the massive evasion of taxes through importation of iron bars and plastics disguised as raw materials.

"It's true that some companies may have engaged in unscrupulous methods of work, but this is not representative of the entire industry. Therefore, in the meeting with URA, we agreed that the tax man should do audits on all of us, to establish our compliance levels," he said.

Roofings' economic advisor, Dr. Martin Kyeyune said in a phone interview that many of the large manufacturers and importers have an open book policy and adhere to tax compliance.

"We saw the president's letter but many of the big manufactures like Roofings have an open book policy. It is also true that there should have been a few unscrupulous companies that engaged in messy dealings, but overall, the industry is compliant," he said.

Repeated efforts to reach URA's assistant commissioner for public and corporate affairs, Vincent Seruma, were fruitless as calls went repeatedly unanswered.

This is one of the avenues through which Uganda can attain a middle income status. Government must invest in the skills, tourism related infrastructure, product development and aggressive marketing. This would generate employment along the entire value chain.

(iii) Minerals , oil and gas

In addition to oil projects, there is need to fast-track the realization of the iron ore and phosphates industries which would be a milestone in the realization of the middle income status. These will create jobs, fertilizers for the agricultural sector; boost the steel industry and generate steel products required by the country in the current northern corridor infrastructure projects and thus save the country the foreign exchange.

The anticipated growth from oil investments will to a greater extent create a middle income country with high poverty disparities. Therefore this will require proper income redistributive policies for oil revenues if we are to attain a middle income country status with inclusive growth by 2020.

(iv) Increased Infrastructure Investment

Addressing Uganda's infrastructure deficit should enhance the country's competitiveness, and drive productivity enhancements in all sectors. Investment in an economy is majorly constrained by a huge infrastructural deficit, unfavorable business environment. Investments in the infrastructure along their different entire value chains would create enormous jobs, and cause tremendous faster realization of the middle income status. This would also increase competitiveness through reducing the cost of production and of doing business; widening and integrating markets; achieving economies of scale; encouraging participation of the private sector; and attracting foreign direct investment and technology. The overall resultant impact of these investments would be an attainment of middle income status. For Uganda to attain the middle income status, Government should:

- a) Fast track the construction of the Standard Gauge Railway System
- b) Finalize the construction of strategic roads especially express Highways and Tourism roads
- c) Entebbe Airport rehabilitation and expansion and revival of the National Carrier
- d) Finalize construction of key Hydro Electricity Dams (Karuma, Isimba, Ayago) and extend the transmission lines
- e) Fast track the construction of the oil pipeline and oil refinery
- f) Extend the National Backbone Infrastructure (NBI) to all districts.

(v) Human capital development

Human capital development particularly in health and education are key in improving productivity, enhancing competitiveness and propelling economic development. Realizing a middle income status will require development of functional health systems, training systems, research and innovation system in the country. The government and all Ugandans have therefore to focus on skills development, innovation in science and technology, and primary health care.

a) Comprehensive Skills Development

- Accelerating the development of five vocational / technical institutions into Regional Centers of Excellence in delivering skills for strategic projects must be done.

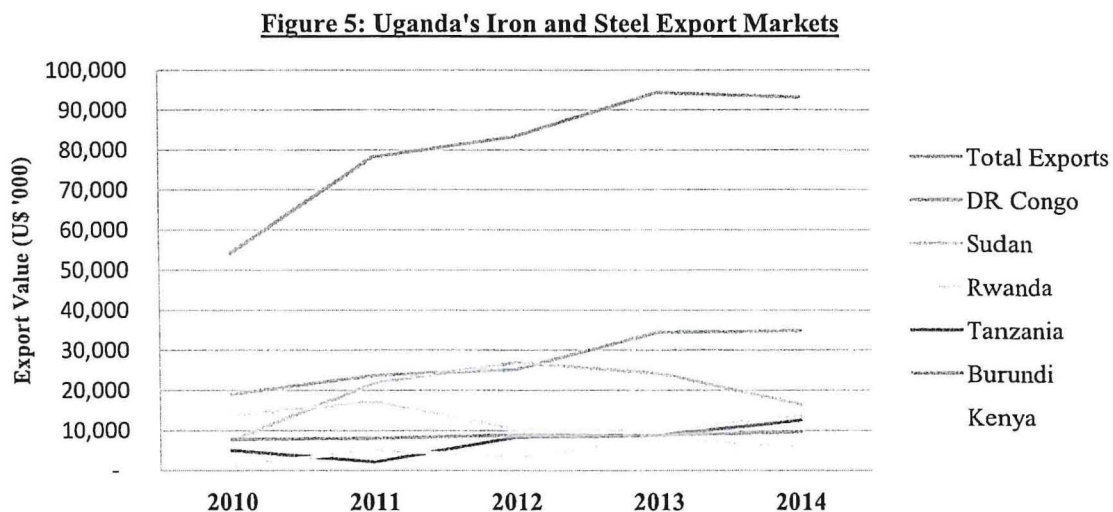
Appendix VIII

The exports by Uganda to the current export markets as compared to the total imports of Iron and Steel of these markets is only about 7%. This is as shown in table 3 below. This gives the potential the country has in terms of the export markets regionally.

Table 3: Share of Uganda's exports to its importing market in tons.

Year	Export to Market	Total Imports	% of Exports
2,012	63,690	1,079,781	5.90
2,013	75,833	1,312,601	5.78
2,014	79,773	1,096,184	7.28

In terms of value of exports to these EAC partner states, DR Congo and S. Sudan, these markets have individually exhibited growth trends of between 5 and 47 per cent over the last 5 years, except Rwanda which is slowly shrinking at -5 per cent. Out of the 29 product lines, Uganda trades in up to 25 – most of which are finished and end-user products such as steel sections, bars, rods and flat rolled products. The figure below shows growth in value of Uganda's iron and steel exports to the regional markets.



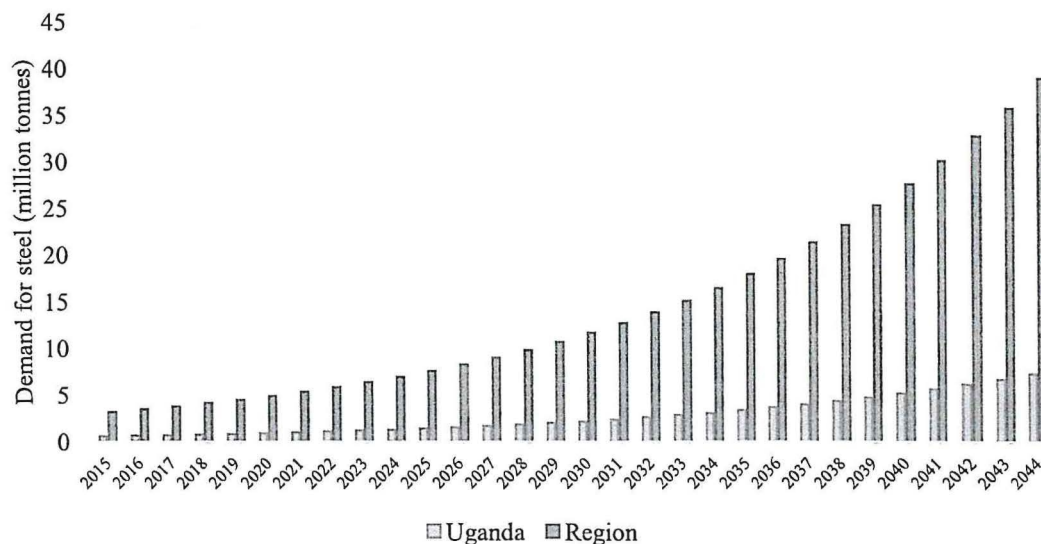
The regional demand for steel products is estimated at 1.8 million tons for Kenya, 900,000 tons for Tanzania, 600,000 tons for Uganda, 200,000 tons for Rwanda and 100,000 tons for Burundi.



This demand is expected grow at an average rate of 9 percent per annum in the next decades. The local demand for steel products is also influenced by the aggregate demand for construction industry in the East African region due to Uganda's strategic location in the region. Uganda's strategic geographical position gives it access to a population of over 500 million people including COMESA and SADC and the economic growth and demand for construction materials is more likely to generate demand for steel products from the domestic industry. It should be noted that the decline in CAR, Sudan and Burundi is a result of the insecurity while the decline in Tanzania is as a result of Iron ore developments. To get the trends of exports in the next ten, twenty and thirty years, there is need to extrapolate this data while putting into consideration the Tanzanian developments because their importation will be declining.

With the local and regional demand estimated at 0.60 million and 3.2 million tons respectively in 2015 and anticipated to grow at an annual rate of 9.0 percent. The figure below shows the growth projections of demand for steel in Uganda and the region. The demand is expected to be 7.3 million and 38.95 million tons for Uganda and region by 2044.

Figure 6: Projection of Demand for Steel in Uganda and the East African Region (2015-2044)



2. Effective and Efficient Implementation Framework:

The implementation of government plans, projects and programmes should take care of the existing institutional arrangements and implementation instruments such as the national budgets, Public Investment Plans. The priority sectors should be seen driving the NDPII agenda including Agriculture, Tourism, Energy, Education, Health and Works. Government implementation strategy should be strengthened to maximize institutional synergies amongst the stakeholders to achieve efficiency in resource utilization.

The current Public Investment Management is weak and this has resulted into huge losses especially on infrastructure projects. **This way of doing business as usual has made us realize less than a dollar for every dollar invested according to the World Bank study on PIM in Uganda.** These must be addressed if the returns on investments have to create impact for realization of the middle income status. There is therefore need to have a well-coordinated and strategic partnership within Government and the private sector, the development partners, the civil society and other non-state actors. In this regard, government should:

- a) Enhance and strengthen institutional coordination
- b) Strengthen implementation planning at the sectors, MDAs and LGs
- c) Strengthen public investment management process
- d) Fast track Land Acquisition Legal processes for public projects
- e) Strengthen the Uganda Development Corporation (UDC)
- f) Alignment of budgets and budget Implementation to Plans

3. Effectiveness and Efficiency in Public Service Delivery mechanisms

For Uganda to realize a middle income status, political leadership at the implementation level must stand up to the task. To enhance public service delivery, government needs to;

- a) Focus on the priority sectors of the economy i.e. Agriculture, Tourism, Minerals-oil-and-gas, Infrastructure (transport, ICT, Energy, water for production)
- b) Administer and enforce performance contracts at both political and technical levels: from Ministers, Permanent Secretaries, up-to commissioner levels (or equivalents) should have clear annualized performance targets in line with the NDPII and NRM Manifesto.
- c) Streamline institutional mandates taking regard of policy, planning, implementation, regulation and enforcement.
- d) Streamline procurement systems and processes taking regard of the need to deliver timely services
- e) Address corruption and distortions through strengthening systems, re-inculcating ethics and integrity at all levels of society, and making the fight against corruption a national priority with adequate professional manpower.
- f) Strengthen Public Investment Management. Build sectoral and national capacity for preparation of investment ready projects
- g) Strengthen sectoral, Local Government and MDA level capacity for planning, think tanking, budgeting, monitoring and evaluation
- h) Strengthen standards, regulation, and enforcement in all the priority sectors. This is towards quality assurance, value for money and compliance.

Appendix 1X

Annex 3: List of Key Iron & Steel Companies in Uganda

No.	COMPANY	LOCATION
1	Alam Group of Companies	Plot 86/90, 5th street, industrial area
2	BM Steel Ltd	Plot 9-16, Jetha Ismail Rd. Kakoba, Mbarara
3	BM Technical Services Ltd	Plot 9-76, Jetha Ismail Road, Kakoba
4	East African Roofing Systems Ltd	Plot 55-87, Movit Road Zana
5	Jay Somnath Industries (U) Ltd	Plot 130/138, Block 12, 7th stree Industrial area, Kampala
6	Kyabazinga Industries Ltd	Plot 50 Mutiibwa Road, Jinja
7	Mabaati Roofing Systems Ltd	Plot 15, Wilson street
8	Mesha Steel Limited	Busega
9	MM Integrated Steel Mills (U) Ltd	Plot 10-12, Kibira road industrial area, Kampala, Plot 47-76, sukari sugar, home road, Jinja
10	Modern Steel International Ltd	Plot 4 Kyaggwe Road, Njeru
11	Nile Steel & Plastics Limited	Nangwa - Mukono Industrial Area (Opp. Riley Industries)
12	Pepa Industries Ltd	Viva house Ndeeba - Kampala, opposite the petrol station
13	Pramukh Steel Ltd	Plot 2 - 20, Kyaggwe road, Njeru, Jinja
14	Premier Engineering Works Ltd	Premier Complex, Ntinda Industrial Area, Plot 12, Jinja Road
15	Roof Guard Ltd	Plot 40/41, Sir Apollo Kaggwa road
16	Roofclad Ltd	Plot 86/90, 5th Street, Industrial Area
17	Roofings Limited	Plot 126 Lubowa Estate
18	Roofings Rolling Mills	Namanve
19	Royale Manufacturers Ltd	Plot 638, Balintuma road, Mengo
20	Semjac Steel Mills Ltd	Nalukolongo Industrial Area
21	Shin Core Industry (U) Ltd	Entebe road, plot 300, Lweza kajjansi, Opp. Saracen offices
22	Steel and Tube Industries Ltd	Deals House, Plot 38-40 Mukabya Road, Jinja Road. Nakawa Industrial Area
23	Steel Rolling Mills Ltd	Plot M-78, Tororo Rd. Masese, Plot 86/90, 5th Street Industrial Area

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Kyambugo University Graduate School

Form: KYU/GS/PR/1

APPENDIX 2: PROGRESS REPORT RESEARCH WORK

FACULTY SCH OF MGT & ENT DEPARTMENT MANAGEMENT SCIENCE

STUDENT'S NAME: NGULUBE ISAAC MALABA

REG. No. 15101145214mbale PhD/MSc/MA/MA Phil. MBA Full/Part Time

PROJECT TITLE: FINANCIAL DISTRESS AND PROFITABILITY OF MANUFACTURING FIRMS IN KAMPALA AND WAKISO INDUSTRIAL PARKS

SUMMARY OF WORK COMPLETED

THREE FIFTH OF THE DISSEMINATION COURSE FILE PREPARED

PROPORTION OF ORIGINAL WORK PLAN COMPLETED FIFTY PERCENT

USED OUT OF THE FIFTY PERCENT

CONSTRAINTS, PROBLEMS/SUGGESTIONS TIME MANAGEMENT

WORK PLAN FOR THE NEXT SIX MONTHS ADMINISTRATION OF RESEARCH TOOLS, INCORPORATION OF CORRECTIONS AND SUBMISSION OF THE DISSERTATION

STUDENT'S SIGNATURE [Signature] DATE 19TH OCT. 2018

COMMENTS: BY THE PROGRAMME COORDINATOR

NAME & SIGNATURE

DATE

KYAMBOGO UNIVERSITY

P. O. BOX 1 KYAMBOGO
Tel: 041 - 4286792 Fax: 256-41-220464
Website: www.kyu.ac.ug

Office of the Dean, Graduate School

25th October 2018

To Whom It May Concern

RE: LETTER OF INTRODUCTION

Dear Sir/Madam,

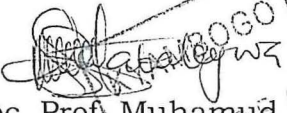
This is to introduce **Mr. Ngolobe Isaac Malaba** Registration Number **15/U/14452/GMBA/PE** who is a student of Kyambogo University pursuing a Masters Degree.

He intends to carry out research on **“Financial Distress and Profitability of Manufacturing Firms in Kampala and Wakiso Industrial Parks.”** as partial fulfillment of the requirements for the award of the Masters in Business Administration.

We therefore kindly request you to grant him permission to carry out this study in your institution.

Any assistance accorded to him will be highly appreciated.

Yours sincerely,


Assoc. Prof. Muhamud N. Wambede
DEAN, GRADUATE SCHOOL

