

**EFFECT OF SHORT TERM DEBT FINANCING ON FINANCIAL  
PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN BONDO**

**BY**

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## **DECLARATION**

This research project report is my original work and has not been presented for a degree in any other university.

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Finally I wish to thank the Almighty God for granting me the opportunity to successfully complete the research project.

## **DEDICATION**

This research project is dedicated to my family members, supervisor and friends who have been very supportive and to the almighty God for the good health of mind that he accorded me.

## ABSTRACT

According to the World Bank, Small and Medium Enterprises (SMEs) contribute to over 60 per cent of total employment in developed countries and 80 percent in developing ones, including the estimated informal sector whereas, according to Organization for Economic Co-operation and Development (OECD) figures, SMEs account for 40 percent of exports of OECD countries, and a somewhat smaller share in developing countries. In Kenya, SMEs subsector is businesses in both formal and informal sectors contributing Kshs 3371.7 billion against a national output of Kshs 9917.4 billion representing a contribution of 33.8 percent in 2015. A majority of the SMEs serve a number of populations and a class of income group who are basically in rural and semi urban set up. Whereas, the exchange functions in the economy may be large scale, medium scale or small scale, the greater orientation in that area or sub economy determine its contribution to that economy. Available information from the trade and licensing records 2017 shows that Bondo region for instance has a majority of its business undertaking classified to small and medium enterprises which attract a funding model relevant for the SMEs. The purpose of this study was to determine the effect of short term debt financing on financial performance of SMEs in Bondo sub county, Kenya. The specific objectives were to determine effect of accounts payable on financial performance of small and medium enterprises and to establish the effect of short term loans on financial performance of small and medium enterprises. A correlation research design was used for the study. A target Population for the study was 503 owners of SMEs operating in Bondo Sub County. 400 owners of small and medium enterprises were sampled by use of stratified random sampling technique as guided by Krejcie and Morgan table. This research used secondary data. The data was obtained from financial statements of SMEs. A pilot study was conducted for instrument reliability and data validity using Cronbach's Alpha and expert opinions was also sort for instrument validation. Data was analyzed using correlation and regression methods. Profit margin ratio, return on assets and return on equity were used as the measurement of performance whereas; short term debt and accounts payable were used as independent variables. The findings of the study revealed that there was a significant moderate positive relationship between accounts payable, short term loan and performance of SMEs. While it concludes that accounts payable and short term loans are important in explaining financial performance of SMES in Bondo Sub County because there is significant association between accounts payable, short term loan and financial performance of SMEs. The study recommends that SMEs should use more of short term debt financing since it's not open to fluctuations.

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## **ABBREVIATIONS & ACRONYMS**

<b>SMES</b>	Small & Medium Enterprises.
<b>MSMEs Micro,</b>	Small & Medium Enterprises.
<b>GDP</b>	Gross Domestic Product.
<b>ROE</b>	Return on Equity.
<b>ROA</b>	Return on Asset.
<b>STDF</b>	Short Term Debt Financing.
<b>OECD</b>	Organization for Economic Co-operation & Development.
<b>DFI</b>	Development Financial Institution.
<b>IFIs</b>	International Financial Institutions.
<b>ILO</b>	International Labour Organization.

## **DEFINITION OF TERMS**

**Debt Financing** -Debt financing is money that you borrow to run your business. Debt Financing is a financing strategy designed to increase the rate of return on owners' investment by generating a greater return on the borrowed funds than the cost of using the funds.

**Short Term Debt** -Financing usually applies to money needed for the day-to-day operations of the business, such as purchasing of inventory, supplies, or paying the wages of casuals and employees. Short term financing is referred to as an operating loan or short term loan because scheduled repayment takes place in one year.

**Financial performance:** This is most often defined as increased in the turnover or wider profit margins, and the ability to contribute to wealth and job creation through business start-up, survival, and growth. Financial performance can be measured using profitability, return on asset, liquidity, solvency, and sales growth and all these can be obtained from the financial statements and reports

**Small and Medium Enterprises (SMEs)** –Small and medium-sized enterprises (SMEs) refers to enterprises which employ 6 to 50 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro (European Commission, 2010)

**Return on assets (ROA)** - measures how efficiently a company uses the firm's assets to generate operating profits. ROA also measures the total return to all providers of capital (debt and equity). If a company carries no debt, its ROE and ROA would be the same.

**Return on equity (ROE)** measures how much net income was earned as a percentage of shareholder's equity, it show how much profit a company generates with the money shareholders have invested.

**Accounts payable-** Accounts payables are suppliers whose invoice for goods or services have been processed but who have not been paid.

**Short term loan-** is granted by banks to meet the working capital needs of business. The working capital needs refer to financial needs for such purposes as, purchase of raw materials, payment of wages, electricity bill, taxes etc. Such loans are granted by banks to its borrowers to be repaid within one year.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background Information

Performance is a set of financial and nonfinancial indicators which offer information on the degree of achievement of objectives and results Lebars and Euske (2006). According to Brumbach (1998) 'Performance means both behaviors and results; Where behaviors are the product of mental and physical efforts applied to tasks and that can be observed apart from the result from the job. This definition of performance implies, that when managing performance both inputs (behavior) and outputs results) need to be considered.

Financial performance is the process of measuring the results of a firm's policies and operations in monetary terms Erasmus (2008). Ashok (2009) defined financial performance as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. Tehrani and Rahnama (2006), defines financial performance as a measure of how well a firm uses its available resources in the generation of revenues and provides a guideline that gives a way for future decisions relating to business developments, assets acquisitions and managerial control. It reflects what has been achieved by the management in monetary terms over a specific duration and can be utilized in making comparison of like firms in the one industry. While, Ongeri (2014), state that, financial performance provides an avenue for the evaluation of business activities in objective monetary terms. It shows how better a shareholder is at the end of an accounting period than he was at the beginning and this can be ascertained by utilizing financial ratios derived from financial statements or using data on market share prices.

Information on financial results is useful in predicting the capacity of the enterprise in analyzing its performance against the set objectives Levasseur (2002). Return on equity, Return on assets, profitability growth, and sales growth are all financial measures of financial performance of business enterprises, including SMES; which are used to measure different degrees of outcome Crabtree and Debusk (2008). According to the Wheeler, "Business finance is that business activity which concerns with the acquisition and conversation of capital funds in meeting financial needs and overall objectives of a business enterprise". While, according to Guthumann and Dougall (1955), business finance is the activity that is concerned with planning, raising, controlling and administering of the funds used in the business". However, in the words of Parhter and

Wert, “Business finance deals primarily with raising, administering and disbursing funds by privately owned business units operating in nonfinancial fields of industry”. Therefore finance function is the process of acquiring and utilizing funds of a business and it relates to overall management of an organization.

Financial performance is influenced by the general capital structure of an organization. Capital structure refers to the different options used by a firm in financing its assets Bhaduri (2002). Huang and Vuthi (2003) noted that a firm has three main sources of financing to fund new investment opportunities. They state that this includes the use of retained earnings, issuing new shares (equity) or borrowing money through debt instruments (debt capital). These sources of financing constitute the capital structure of a firm and also reflect the ownership structure of the firm. The foundation for theories and research focus on the subject of capital structure began with the introduction of Modigliani and Miller’s (M&M) theoretical model about corporate capital structure in 1958 which is considered to have created the turning point for modern corporate finance theory. The theory provides insight into a firm’s capital structure decision in a capital market free of taxes, transaction costs, and other frictions. Sibilkov (2009), state that equity enables the firm to obtain funds without incurring debt. It means that the fund obtained through equity do not have to be repaid back. The entrepreneurs who purchase shares in the firm hope to reclaim their investment out of future profits. The shareholders are entitled to share in the profits of the firm in the form of dividends or future capital gains and in the event of loss, he state, that the shareholders have limited liability, which means that the only loss they face is the amount that they had invested in the business.

Watson and Wilson (2002), has defined debt capital as a capital which a business raises by taking out a loan. It can be categorized in terms of long term, midterm, or short term; all of which apply differently to different institutions. It differs from equity or shares capital because subscribers to debt capital do not become owners of the firm but are creditors, and suppliers of debt capital usually receive a fixed annual percentage return on their loan. Debt financing has both an advantage and a disadvantage on the growth of corporations and for its strategic investments O’Brien and David (2010). According to Fama and French (2002), the benefits of debt financing include the tax deductibility of interest and the reduction of free cash flow problems, while the costs of debt financing include potential bankruptcy costs and agency conflicts between stockholders and debt

holders. The over load cost of debt financing is commonly mitigated to various loan structure by analyzing credit practices considered in issuances of loan. Such components as collateral, capital base and imputed cost, Imputed cost are normally not levied on by micro finance institution. Therefore, in making debt financing decisions, managers try to create a balance between the corporate tax advantages of debt financing and the costs of financial distress that arise from bankruptcy risks, Kraus and Litzenberger (1973). Loans and overdrafts are the most common forms of debt finance. Debts are therefore required for the daily operations of the business enterprise.

Short-term debt can have multiple meanings, but is most commonly viewed as debt that is money market fund, Gambone and Trevino (2015). Short-term debt (also called “revolving debt”) is used to fund short-term financial commitments, such as funding payroll and managing regular, recurring expenses like utilities and rent. Though these commitments vary widely, they are all considered short-term because money borrowed to pay for them generally takes less than one year to repay- Guin, (2011), He farther says that short term financing includes the following financial instruments; commercial papers, promissory notes, asset-based loans, letters of credit, among others. According to the matching principle of finance, short-term assets should be financed with short-term liabilities and long-term assets should be financed with long-term liabilities, Short-term assets and liabilities are generally defined to be those items that will be used, liquidated mature or paid off within one year, Guin (2011). The components of short term debts includes, short term bank loan, accounts payable, lease payment among others.

Small and medium enterprises encompass a broad spectrum of definitions. Dalberg report of (2011) defines SMEs as having more than five and fewer than fifty employees. Whereas, Inter-American Development Bank defines Small and Medium Enterprises as having a maximum of one hundred employees and less than three million U.S Dollars in revenue. Nataraja and Wyrick (2011) considered SMEs to have less than 500 employees. The world trade report of 2016 and Kenya National bureau of statistics basic report of 2016 defines small enterprises as firms with a number of employees ranging between 10 and 50. While medium sized enterprises are firms with a number of employees ranging between 50 and 250. While, the regulatory and institutional framework for Kenya (MSMEs Act 2012), considers SMEs based on the number of staffs and the company's annual turnover. For instance, the micro enterprises have been defined as those employing

less than ten workers with annual turnovers of less than Kshs 500,000 and capital formation of less than Kshs 5 million for services or less than KES 10 million for enterprises doing manufacturing. From the different definition I can say that SMEs are viewed differently depending on the county but taking into account the number of employees, capital formation and annual turnover. Small and medium enterprises sector in the country comprises of manufacturing, service, and trade, (wholesale and retail) sub-sectors, with substantial engagement in agro-based activities.

According to Bangasser (2000), SMEs in Kenya came to effect after the ILO report of 1972, which recognized SMEs as a sector for creating income and employment for the Kenyan population. A further effort by the government formulation of a policy framework on SMEs was recognized in Sessional Paper No.2 of 1992, "Small and Medium Enterprises (MSMEs) and Jua Kali Development in Kenya," Kenya national assembly, (1992). The Sessional Paper recommended that the relevant ministries in consultation with the Attorney general's office address the regulatory framework to support the creation of an enabling business environment for SMEs. Another Sessional Paper No.2 on the development of SMEs for employment and wealth creation for poverty reduction was formulated and published in 2005. The paper spelled out some of the key measures to address business registration; business licensing and tax regime. Another policy regime which attempted to address the SMEs issues integrated the SMEs matters in the Private Sector Development Strategy (2006-2010). The strategy considered SMEs as a central link between the private sector and poverty reduction.

According to the recent studies, economic growth of any country closely links with the SME development. For example, Beck (2005) explains that there is a robust, positive relationship between the economic growth and the SME's relative size. Similarly, Ayyagari (2007), notes that the contributions of formal SMEs in the high - income countries amount to nearly 50 percent of GDP on an average. It is also important to note that much of employment generation is through the growth of SME sector only (Ardic, Mylenko & Saltane 2011). According to the World Bank, small and medium enterprises contribute to over 60 per cent of total employment in developed countries and 80 percent in developing ones, including the estimated informal sector (World Bank, 2013). Also, according to Organization for Economic Co-operation and Development (OECD) figures, SMEs account for 40 percent of exports of OECD countries, and a somewhat smaller

share in developing countries. In Kenya, SMEs subsector is businesses in both formal and informal sectors contributing Kshs 3371.7 billion against a national output of Kshs 9917.4 billion representing a contribution of 33.8 percent in 2015, (Kenya national bureau of statistics 2016). Though it is observed that the role of SMEs is increasing significantly in respective national economies, a lot needs to be done to ensure the development of the sector and to improve it significantly in the world trade. Since the creativity of small companies is the fuel of the entrepreneurial spirit and the economic growth.

In emerging economies, SMEs provide the vast majority of those jobs. Yet every second business remains credit constrained in emerging markets, and struggles to raise the financing necessary to invest and create new jobs. New research by McKinsey and IFC found that 70 percent of the micro, small and medium enterprises (MSMEs) in these countries does not use any external financing from formal financial institutions, and another 15 percent are underfinanced from formal sources. This explains why SME finance has been a key part of the agenda of the G-20 since the Pittsburgh Summit. While some progress has been made, it will require further commitment from governments, development financial institutions (DFIs) and international financial institutions (IFIs), financial institutions, and the private sector to unleash the growth potential of SMEs.

From the available literature relating directly or indirectly short term financing and financial performance reveals; Abdu's (2013) considering effect of lease finance on performance of SMEs in Bangladesh, established a positive correlation between lease finance and return on equity/return on assets. Yujie (2013) in a study of effect of trade credit and profitability in small and medium enterprises in Netherlands, had findings showing that SMEs can establish a long term relationship with their suppliers to gain credit since accounts payable is positively related to the profitability. Yuba and Zubairu (2015), looking at the impact of banking sector credit on the growth of small and medium enterprises in Nigeria, established that banking sector has significant impact on the growth of small and medium enterprises since it has a positive impact on inflation, exchange rate and trade debt. Githaiga and Kabiru (2015), in a study of the effect of debt financing and financial performance of small and medium size enterprises in Kenya, established that long term loan and short term loan had negative impact on financial performance of SMEs. Dube (2013), considered the impact of debt financing on productivity of small and medium scale enterprises in Masvigo urban, the result showed

that debt financing had a positive impact on productivity of SMEs. Githire and Muturi (2015), studied the effects of capital structure on financial performance of firms in Kenya, listed at the Nairobi securities exchange, the findings showed that equity and long term debt had a positive and significant effect on financial performance, while short term debt had a negative and significant effect on financial performance.

The above studies looked at debt financing in general and agrees that debt has an effect on the performance of SMEs either positively or negatively. However, in the context of their approaches, there is limited linkage created between short term debt financing and performance, especially for SMEs. The literature evidences also reveal that debt financing has the potential for spurring business performance for SMEs, but limited information is available about short term debt financing and its contribution on the performance of SMEs. Because short term debt financing address business operation on a day to a day occurrences, it's imperative that analysis of short term debt financing on the performance of SMEs be carried out.

## **1.2 Statement of the Problem**

The available literature on debt financing and performance of SMEs reveals mixed results; but generally agrees that debt has positive or negative effect on the performance of SMEs. Consequently, in the context of their approaches, there is limited information linkage between short term debt financing (STDF) and performance, especially for SMEs, despite the short time variation in recovery of such credits. Whereas literature also reveals that debt financing has potential for spurring business performance in general and specifically for SMEs, there is limited information on the contribution of Short Term Debt Financing to performance of SMEs. Because short term debt financing address business operation on a recurrent manner, it is imperative that analysis of short term debt financing on the performance of SMEs be undertaken. The previous study reveals that accounts payables, both negatively and positively affects the performance of the large firms as it is important in meeting the recurrent expenses. Hover little has been studied on how and to what extent it affects the financial performance of SMEs. It is from this background that this study seeks to determine the effect of account payable on the financial performance of SMEs.

### **1.3 Objectives of the Study**

The general goal of the study was to determine the effect of short-term debt financing on the financial performance of small and medium enterprises in Bondo Sub County.

#### **1.3.1 Specific Objectives of the Study**

The study was guided by the following specific objectives:

- i. To determine the effect of accounts payable on financial performance of Small and Medium Enterprises in Bondo sub county.
- ii. To establish the effect of short term loans on financial performance of Small and Medium Enterprises in Bondo sub county.

### **1.4 Hypotheses of the Study**

*H<sub>01</sub>*: Account payable has no significant effect on financial performance of Small and medium enterprises

*H<sub>02</sub>*: A short term loan has no significant effect on financial performance of small and medium enterprise.

### **1.5 Significance of the Study.**

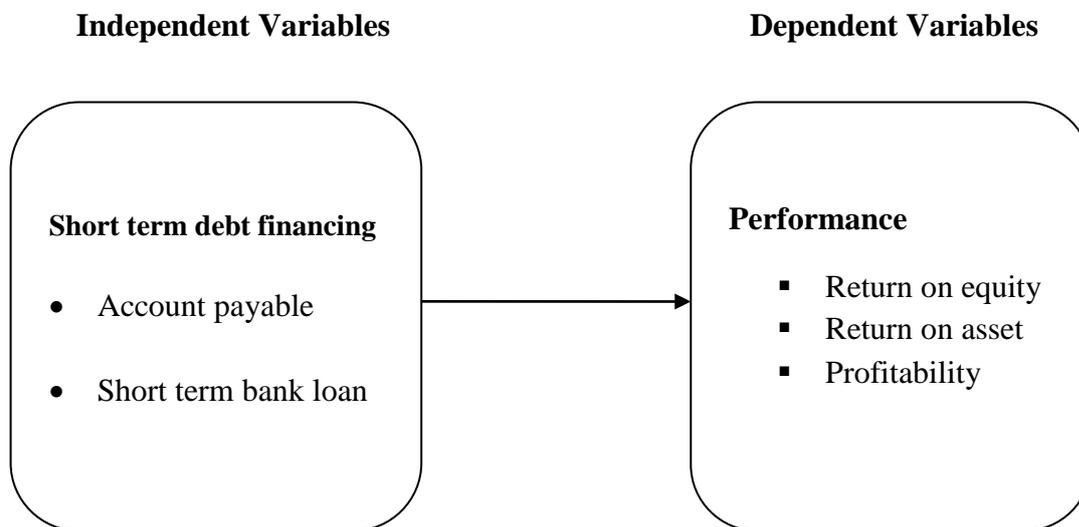
The study will be significant in advising in the appropriate financing model relevant to SMEs. It will also assist the government in the formulation of policies that favors SMEs and have an insight on how to improve the skills of the entrepreneurs to boost the growth of SMEs. To entrepreneurs, it provides knowledge on how to manage their funds for business continuity. To scholars and future researchers, the study will form a basis for future research by providing additional information on this particular topic.

### **1.6 Scope of the Study**

This research dealt with 70% of small and medium (SMEs) enterprises in Bondo who had acquired loan facilities from the financial institutions. The rationale for focusing on the SMEs in Bondo was that there is significant growth potential of SMEs in the region into major business institutions. A part from this very limited documentation on the effect of short-term debt financing on the financial performance of SMEs exists. Bondo is situated in Siaya County, Nyanza, Kenya; its geographical coordinates are 0° 14' 19" North, 34° 16' 10" East.

## 1.7 Conceptual Framework

The conceptual framework diagrammatically shows the relationship between independent variables, dependent variables and the intervening variables of the study



**Figure 1.1: Conceptual Framework showing relationship between short term debt financing and financial performance of SMEs.**

**Source: Self conceptualization2017.**

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Concept of Financial Management**

Financial performance has been described by Onger (2014) as the evaluation of business activities in objective monetary terms. It shows how better a shareholder is at the end of an accounting period than he was at the beginning and this can be ascertained by utilizing financial ratios derived from financial statements or using data on market share prices. Information on financial results is useful in predicting the capacity of the enterprise in analyzing its performance against the set objectives

### **2.2: Theoretical Review**

The theoretical review of this study deals with two theories of pecking order theory and static trade off theory.

#### **2.2.1: Pecking Order Theory**

Pecking order (also called adverse selection or financing pyramid) in its simplest form is a preference theory, which progressively exploits financing choices from the least costly to the most expensive. The pecking order theory has been mainly associated with Stewart Myers (Myers (1984), Myers and Majluf (1984). According to the pecking order theory, management prefers to finance their business first, from retained earnings, followed by debt, then with hybrid forms of finance such as convertible loans, and last of all by using externally issued equity. Norton (1991) found out that 75% of SMEs seems to make financial structures decisions within pecking order framework which is consistent with small and micro enterprises sector because they are managed by the owner who does not want to dilute their ownership. Owner-managed businesses usually prefer retained profits because they want to maintain the control of assets and the business. Financing, from equity, minimize financial distress because there are no outsiders who can force the company into liquidation and therefore the business will grow at a slow rate, but the owner is sure of survival with little profits and no interest paid to the outsiders (Norton, 1991).

### **2.2.2. Static Trade-off Theory**

The basic concept behind the static trade-off theory is to minimize the cost of capital by employing an appropriate debt and equity financing. Firms are partly financed by debt and equity and the main benefit of debt financing is the tax benefit of that debt, while on the other hand, the disadvantage of debt financing is debt cost i.e. the interest or return which company pays on debt which is referred as bankruptcy cost. The static tradeoff theory of capital structure states that in order to maintain the balance between the pros and cons of debt and equity financing, the firm must choose the mixed type of financing. Moreover, the cost of capital cannot be minimized by increasing the debt level because at a specific point, the cost of debt will become more expensive than the cost of equity hence increases the Leverage level and due to which the risk of creditor increase as a result the required rate of return increases. Furthermore, the increased amount of debt also makes the investors and shareholders' financial position more risky. Hence, up to a certain limit, the cost of capital can be decreased by increasing debt. However, after that limit, the cost of capital will start increasing. Therefore, firms usually use the mixture of debt financing and equity financing in order to minimize the average cost of capital and to increase the market value per share. The static tradeoff theory of capital structure of firms varies from sector to sector. Industries, whose firms are more tangible, tend to borrow more rather than use the equity because assets of these industries are collateral and considered relatively safe. By using Trade off theory, Rajan and Zingales (1995) concluded that there is a positive correlation between Leverage, and profitability of a firm, whereas tangibility of assets and the size of the firm are positively correlated with firm's Leverage. Therefore, Static trade-off models understand the optimal capital structure is achieved when the marginal present value of the tax shield on additional debt is equal to the marginal present value of the costs of financial distress on additional debt. On the other hand, the pecking-order theory suggests that there is no optimal capital structure but firms ration between internal financing (retained earnings) to external funds depending on the extent of perceived information asymmetry in the financing environment.

## **2.3. Empirical Literature Review**

### **2.3.1. Accounts Payable on Performance of SMEs.**

Ikechukwu and Nwakaego (2015), studied the effect of accounts payable ratio on the financial performance of food and beverages manufacturing companies in Nigeria, using

multiple regression analysis, showed that accounts payable ratio had negative significant effect with the profitability ratio. Madishetti and kibona (2013), investigated the impact of receivables and payables management on the profitability of SMEs in Tanzania, using regression analysis, the result showed that positive relationship is observed between average payment period and gross operating profit. Hassan (2016), examined the effect of trade receivables and inventory management on SMEs performance in Malaysia. Secondary data was (Nwakaego, 2015) collected from financial reports and using regression analysis the result revealed that days account receivables and inventory turnover in days are negatively related to SMEs profitability. Rizwan and Shah (2015), studied the impact of working capital management on firms performance: A case of textile spinning sector in Pakistan, using panel data with 10 companies as participants, from 2008-2014 and spearman's correlation and linear regression analysis, established weak negative relationship between account receivable turnover, account payable turnover with ROE and ROA. Aravind (2016), examined the influence of working capital metrics on profitability: A critical examination on Indian manufacturing sector, using descriptive and inferential statistical measures with 100 manufacturing companies participating from 2005-2015. the result revealed that cash conversion cycle is positively correlated to net profit ratio but negatively related to the return on equity, (ROE). Awan, Shahid, Hassan and Ahmed (2014), studied the impact of working capital management on profitability of cement sector in Pakistan, secondary data was collected from financial reports with 10 cement companies participating in the study from 2009-2013, using correlation coefficient and multiple regression analysis, the finding showed that return on equity is negatively correlated with the cash conversion cycle, current ratio and inventory turnover in days. Achode and Rotch (2016), studied the effects of account payable as source of financing on performance of listed manufacturing firms at the Nairobi securities Exchange, using census sampling technique and multiple regression model the result showed that there is direct positive relationship between accounts payable and performance of the firms. Sadiq (2017), studied the impact of working capital management on SMEs performance in Nigeria, secondary data was collected from financial report and using regression analysis the findings revealed that accounts payable period, cash conversion cycle and net trading cycle has positive effect on performance.

### **2.3.2: Short Term Loans on Performance of SMEs**

(Abor, 2013) studied the effect of capital structure on profitability of listed firms on Ghana stock exchange, using panel data and regression analysis. The result showed a significantly positive relation between the ratio of short term debt to total assets and ROE. However, a negative relationship between the ratio of long term debt to total assets and ROE was found. Wanambisi, and Bwisa (2013), on effects of microfinance lending on business performance: a survey of micro and small enterprises in Kitale municipality, Kenya; .using descriptive survey research design with 120 SMEs as participants established that the amount of loans is significantly and positively related with performance of MSMEs in Kitale municipality. Asare and Angmor (2015), investigated the effect of debt financing on the profitability of SMEs in Accra metropolis, using secondary data from 50 SMEs from 2004-2013 and panel research design and multiple regression analysis, the result showed that short term loan ratio have a significant negative relationship with both profit margin ratio and return on assets. It also revealed a positive insignificant relation between long term loan ratio and profit margin but an insignificant negative relation was established with return on assets. Mwangi and Birundu (2015), the effect of capital structure on the financial performance of small and medium enterprises in Thika sub county, Kenya, While using descriptive research design and multiple linear regressions with 40 SMEs participating in the survey, found out that there was no significant effect of capital structure, asset turnover and asset tangibility on the financial performance of SMEs in Thika sub-county, Kenya. Kyule and Ngugi (2014). Looked at the Influence of capital structure on leverage of small and medium size enterprises in Kenya, Using descriptive survey design and regression analysis model with 430 SMEs participating in the survey, established that there is positive relationship between the level of leverage and the firms size. Yuba and Zubairu (2015), looking at the impact of banking sector credit on the growth of small and medium enterprises in Nigeria. Using time series design and both descriptive and correlation matrix analysis, established that banking sector has significant impact on the growth of small and medium enterprises since it has a positive impact on inflation, exchange rate and trade debt. Kariuki and Ngugi (2014), studied the effect of table banking on the performance of micro and small enterprises in Nairobi County. The study adopted a descriptive research design and correlation analysis model with 250 managers of micro and small enterprises participating in the survey. Its finding shows that table banking has increased ease of access of credit for micro and small enterprises in Nairobi County. Abdu's (2013) considered the effect of

lease finance on performance of SMEs in Bangladesh using cross sectional methods and 53 managers of SMEs with the use of regression analysis, established a positive correlation between lease finance and return on equity/return on assets. Bello, Ahmad and Aliyu (2016), Examined the impact of lease financing on financial performance of Nigeria oil and gas industry, the data for the study was collected from annual reports and accounts of 6 sampled companies in the Nigerian Oil and Gas industry that are engaged in lease financing and were also listed on the Nigerian Stock Exchange (NSE). Regression analysis was used to analyze the data, the results of the study revealed that lease financing has significant impact on the ROA of oil and gas companies in Nigeria. Wafula, Namusonge and Nambuswa (2016), considered the effect of leasing on the financial performance of the county government of Trans Nzoia, the study adopted a descriptive survey research design with 10 departments and 10 officials participating in the survey, Statistical Package for Social Science (SPSS) version 22 and regression analysis was used. The results showed that financial lease, had positive effects on ROA and financial performance of the county government of Trans Nzoia. Mwangi, Makau and Kosimbei (2014), and investigated the relationship between capital structure and performance of non financial companies listed in the Nairobi securities exchange, Kenya. Explanatory non –experimental research design was used with 44 non financial companies participating in the survey, while using descriptive statistics, correlation analysis, and panel multiple regression analysis, their finding showed that financial leverage had a statistically significant negative association with performance as measured by return on assets (ROA) and return on equity (ROE). Seyoum, testay and kassahun (2016), examined working capital management and its impact on profitability : evidence from food complex manufacturing firms in Addis Ababa, from 2009-2013, using descriptive statistics and multiple regression analysis, findings show that average days in inventory, have a significant impact on return on assets.

## **CHAPTER THREE: RESEARCH METHODOLOGY.**

### **3.1 Research Design**

A correlation research design was used. It examines and describes the associations and relationship between two variables. Its main purpose is to establish that a relationship exists between variables and to describe the nature of the relationship. A correlation coefficient (descriptive statistic) helps by assigning a numerical value to the observed relationship. In addition to describing a relationship, correlations allow us to make predictions from one variable to another. If variables are correlated, we can predict the performance of the other with some level of accuracy.

### **3.2 Study Area**

The study was conducted in Bondo Sub County. A majority of the SMEs serve a number of populations and a class of income group who are basically in rural and semi urban set up. Whereas, the exchange functions in the economy may be large scale, medium scale or small scale, the greater orientation in that area or sub economy determine its contribution to that economy. Available information from the trade and licensing records 2017 shows that Bondo region for instance has a majority of its business undertaking classified to small and medium enterprises. Due to their number and implied contribution to that economy it is imperative to find out if short term financing improves performance of SMEs in Bondo. Bondo is situated in Nyanza, Kenya; its geographical coordinates are 0° 14' 19" North, 34° 16' 10" East.

### **3.3 Target Population**

The study population was composed of 503 small and medium enterprises that operate in Bondo Town. The research was focused on the owners of registered SMEs who have obtained short-term credit and loan facilities from financial institutions.

**Table 3.1: Target population**

<b>Types of businesses</b>	<b>Target population</b>	<b>Percentage %</b>
Hard wares	28	6%
General shops	143	28%
Fish vendors	112	22%
Hotels	24	5%
Electronic shops	101	20%
Mpesa shops	95	19%
<b>TOTAL</b>	<b>503</b>	<b>100%</b>

**Source: County Government of Siaya, 2017**

### **3.4: Sample Methods and Sample Size**

The sampling method used was a stratified random sample. It allows the researcher to take into account the different subgroups of people in the population and helps guarantee that the sample accurately represents the population on specific characteristics. This was achieved by dividing the population into subsamples or strata. Using krejcie \$ Morgan sample size table 1970 and confidence level of 95% with margin of error of 5%., a total of 400 owners of small and medium enterprises was sampled as shown on Table 3.2.

**Table 3.2: Sample Size Distribution**

<b>Types of businesses</b>	<b>Target population</b>	<b>Sample size</b>	<b>Percentage %</b>
Hard wares	28	27	7%
General shops	143	103	25%
Fish vendors	112	86	22%
Hotels	24	24	6%
Electronic shops	101	80	20%
Mpesa shops	95	80	20%
<b>TOTAL</b>	<b>503</b>	<b>400</b>	<b>100%</b>

**Source: County Government of Siaya, 2017**

### **3.5: Data Collection Methods**

The research used secondary data. The data was obtained from financial statements such as balance sheet, inventory records among others using secondary data schedule.

### 3.5:1 Reliability and Validity Test.

Mugenda and Mugenda, (2003) defines reliability as a measure of the degree to which researcher's instruments yield consistent results of data after repeated trials. Developed secondary data schedule was sent to some selected sample of the respondent from each respondent and then the information acquired will be evaluated to assess their reliability. The secondary data schedule was given out at random to respondents for pretesting purposes. A pre-test was done on the secondary data schedule using a selected sample of respondents and data acquired was evaluated to check on the reliability of the instrument. The pilot study was done to pre-test the instruments of data collection. Validity refers to the degree that an instrument actually measures what it is designed or intended to measure Aila and Ombok, (2015). Construct validity refers to the extent to which a measured variable measures the conceptual variable (that is, the construct) that it's designed to assess. A measure only has construct validity if it measures what we want it to.

**Table 3.3: Reliability Statistics**

Cronbach's Alpha	N of Items
.703	13

### 3.6: Data Analysis.

Collected data was analyzed using correlation and regression methods. Regression analysis was used to find the relationship between the two variables. This model represents the dependent variable as a function of one independent variable subject to a random ,“ error“, which is assumed to have a constant value of zero (Cottrell, 2003). The regression model used is shown below. The multiple linear regression models were used to determine the relative importance (sensitivity) of each independent variable in affecting the financial performance of SMEs.

$$y = \alpha + \beta_1 \chi_1 + \beta_2 \chi_2 + \dots + \epsilon; \text{Newell, Elmore \& Walker (2012).}$$

Where;

y – Financial Performance of the SMEs as measured by ROA

Return on assets (ROA) = [net income / total assets]

- $\alpha$  – Constant Value
- $X_1$  – Short term loan.
- $X_2$  – Accounts payable
- $\epsilon$  – The error or disturbance term

### **3.7: Data Presentation**

Analyzed data was presented by use of tables, pie charts and graphs using frequencies and percentages for interpretation.

### **3.8: Research Ethics**

This study acknowledged the importance of ethical issues in a research study and therefore the researcher observed the ethical issues of honesty, confidentiality, integrity, and respondents rights while handling and getting information from the sources. The researcher ensured tolerance and patience throughout the research period. A letter from the university was used to prove that the data acquired was meant for academic purpose only.

## CHAPTER FOUR: RESULTS AND DISCUSSION

### 4.1 Introduction

This chapter presents the results of the present study on the effect of short term debt financing on financial performance of SMEs in Bondo Sub County in Kenya. The presentation of the result has been done in two sections. These include demographic information and financial performance of SMEs.

### 4.2 Demographic Results

#### 4.2.1 Response Rate

There was 100% response rate of the targeted business managers. The research intended to contact 400 managers / owners of SMEs which was actually achieved, which is in line with mugenda and mugenda (2003), which state that a response of above 50% is satisfactory to give reliable information.

#### 4.2.2 Gender of Respondents

**Table 4.1: Gender of Respondents**

<b>Gender of respondents</b>	<b>Frequency</b>	<b>Percent</b>
Male	177	44.3
Female	223	55.8
<b>Total</b>	<b>400</b>	<b>100.0</b>

**Source: Research data 2017**

Table 4.1 presents the information on the gender of respondents, in order of frequency and respective percentage scores. The results reveal that of all the respondents, 177 were males, constituting 44.3%; while 223 of the study respondents were females, constituting 55.8%. This information reveals that majority of the Small and Medium Enterprises (SMEs) in Bondo Sub County are managed by women. This information compares with the global data on Small and Medium Enterprises (SMEs); where according to the Asia-Pacific Economic Cooperation (APEC) (2016), while SMEs account for a large fraction of all enterprises across APEC economies, on average, only 37% of SMEs are owned by women. While international finance corporation (2014) estimate that globally there are roughly 9.34 formal million women owned SMEs in over 140 assed countries, which is approximately one third of all formal SMEs.

### 4.2.3 Age of the Respondents

**Table 4.2: Age of the Respondents**

Age of the respondents	Frequency	Percent
11-20	17	4.3
21-30	169	42.3
31-40	115	28.8
41-50	66	16.5
51 and above	33	8.3
<b>Total</b>	<b>400</b>	<b>100.0</b>

**Source: Research data 2017.**

The table 4.2 presents information on the chronological age of the respondents for the study. The information reveals that 4.3% of the Small and Medium Business entrepreneurs in Bondo falls in the age bracket of 11-20, 8.3 % falls in the age bracket of 51 and above and the majority of the SMEs owners were in the age bracket of 21-30 constituting 42.3% of the respondents, followed by the age bracket of 31-40 consisting of 28.8% of the respondent. This is in reflection with the vibrant age of the majority of labor industry.

### 4.2.4 Types of Business

**Table 4.3: Type of Business**

Type of business	Frequency	Percent
Hardware	27	6.8
General Shop	103	25.8
Electronic Shop	80	20.0
Hotels	24	6.0
Fish Vendor	86	21.5
Mpesa	80	20.0
<b>Total</b>	<b>400</b>	<b>100.0</b>

**Source: Research data 2017.**

Table 4.3 gives the information on the types of business, in order of frequency and respective percentage scores. The findings revealed that Most of the respondents were drawn from general shops at 25.8%, fish vendors at 21.5%, Electronic shop and mpesa at

20.0% Hardware at 6.8%, while the least at 6.0% drawn from Hotels industries. This compares to the global trend which argues that most SMEs jobs are in the service sector, which accounts for two thirds of economic activities and employment OECD countries. These businesses includes wholesale and retail trade, the electronic shops, hotel and restaurants among others, OECD policy brief of (2000).

#### 4.2.5 Age of the Business

**Table 4.4: Age of the Business**

<b>Age of business</b>	<b>Statistic</b>
Mean	6.1175
Minimum	1.00
Maximum	22.00
Range	21.00

**Source: Research data 2017.**

The oldest SME in Bondo had operated for 22 years while the new SME has been in operation for 1 year. This gives a range of 21 years. The mean age of operation was 6.1175 years. This compares to what Mason (2009), state that small business Administration (SBA) keeps the stats on business failures and claims that more than a half of new business will disappear in the first five years.

#### 4.3 Accounts payable on performance of SMEs.

##### 4.3.1 Correlation between Accounts payable and Return on Asset

**Table 4.5: Correlation between Accounts payable and Return on Asset**

		<b>Accounts payable</b>	<b>Return on Asset</b>
Accounts payable	Pearson Correlation	1.000	
	Sig. (2-tailed)		
	N	400	
Return on Asset	Pearson Correlation	.223**	1.000
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Research data 2017.

Correlation analysis was employed to establish the strength of relationship which exists between accounts payable and return on assets. The result revealed a significant weak

positive relationship between accounts payable and return on asset,  $r=0.223p<0.001$ . This meant that as Accounts payable increases, return on asset also increases. These findings indicate that there is a relative support for the existence of a positive significant relationship between accounts payable and return on assets. Sadiq (2017), studied the impact of working capital management on SMEs performance in Nigeria, secondary data was collected from financial report and using regression analysis the findings revealed that accounts payable period, cash conversion cycle and net trading cycle has positive effect on performance. Achode and Rotch (2016), studied the effects of account payable as source of financing on performance of listed manufacturing firms at the Nairobi securities Exchange, using census sampling technique and multiple regression model the result showed that there is direct positive relationship between accounts payable and performance of the firm. Madishetti and Kibona (2013) investigated the impact of receivables and payables management on the profitability of SMEs in Tanzania, using regression analysis, the result showed that positive relationship is observed between average payment period and gross operating profit. Seyoum, Testay and Kassahun (2016), examined working capital management and its impact on profitability : evidence from food complex manufacturing firms in Addis Ababa, from 2009-2013, using descriptive statistics and multiple regression analysis, findings show that average days in inventory, have a significant impact on return on assets. Hassan (2016) examined the effect of trade receivables and inventory management on SMEs performance in Malaysia. Secondary data was collected from financial reports and using regression analysis the result revealed that days account receivables and inventory turnover in days are negatively related to SMEs profitability.

#### 4.3.2 Correlation between Accounts Payable and ROE.

**Table 4.6: Correlation between Accounts payable and ROE**

		Accounts payable	ROE
Accounts payable	Pearson Correlation	1.000	
	Sig. (2-tailed)		
	N	400	
ROE	Pearson Correlation	.307**	1.000
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Research data 2017.

A correlation analysis between accounts payable and return on equity revealed that there was a significant moderate positive relationship between accounts payable and return on equity,  $r=0.307$   $p<0.001$ . This meant that as account payable increases, return on equity also increases. But the available literature indicates that; Rizwan and Shah (2015), studied the impact of working capital management on firms performance: A case of textile spinning sector in Pakistan, using panel data with 10 companies as participants, from 2008-2014 and spearman's correlation and linear regression analysis, established weak negative relationship between account receivable turnover, account payable turnover with ROE and ROA. Awan, Shahid, Hassan and Ahmed (2014), studied the impact of working capital management on profitability of cement sector in Pakistan, secondary data was collected from financial reports with 10 cement companies participating in the study from 2009-2013, using correlation coefficient and multiple regression analysis, the finding showed that return on equity is negatively correlated with the cash conversion cycle, current ratio and inventory turnover in days.

### 4.3.3 Correlation between Accounts payable and Net Profit Margin

**Table 4.7: Correlation between Accounts Payable and Net Profit Margin**

		Accounts payable	Net Profit Margin
Accounts payable	Pearson Correlation	1.000	
	Sig. (2-tailed)		
	N	400	
Net Profit Margin	Pearson Correlation	-.624**	1.000
	Sig. (2-tailed)	.000	
	N	400	400

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

Source : Research data 2017

It was established that there was a significant moderate negative correlation between Accounts payable and Net Profit Margin,  $r= -0.624$   $p<0.001$ . This meant that when accounts payable increase then the net profit margin also decreases. Kapkiyai & Mugo (2015) examined the effect of trade credit on financial performance of small and medium enterprises: evidence of Eldoret town, Kenya. 50 SMEs were used as participants and documentary guide was used to collect secondary data. Both correlation and regression was used to analyze the data. Findings showed that trade credit positively affected liquidity, profit margin and return on assets.

#### 4.4 Regression Analysis

**Table 4.8: Regression Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	SE				Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	.384	.030		12.603	.000	.324	.444		
Short term loan	2.268	.000	.743	20.015	.000	.000	.000	.866	1.155
Accounts payable	2.347	.000	.495	13.351	.000	.000	.000	.866	1.155

a. Dependent Variable: Return on Asset

Source: Research data 2017.

$$y = \alpha + \beta_1 \chi_1 + \beta_2 \chi_2 + \dots + \epsilon; \text{ Newell, Elmore \& Walker (2012).}$$

Substitutes

$$y = 0.384 + 2.268 \chi_1 + 2.347 \chi_2 + 0.030$$

Holding other factors constant; if short term loan increases by one unit the firms performance will go up by 2.268 units.

Holding other factors constant; if accounts payable increases by one unit the firms performance will go up by 2.347

#### 4.5 Short Term Loans on Performance of SMEs.

##### 4.5.1 Correlation between Short-term Loan and Return on Assets

**Table 4.9: Correlation between Short-Term Loan and Return on Assets**

		Short term loan	Return on Asset
Short term loan	Pearson Correlation	1.000	
	Sig. (2-tailed)		
	N	400	400
Return on Asset	Pearson Correlation	.561**	1.000
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Research data 2017.

A correlation analysis between short term loan and return on assets indicates that there was a significant moderate positive relationship between short-term loan and return on asset,  $r=0.561$   $p<0.001$ . This meant that as short-term loan increases, return on asset also increases. This finding is in line with the work of other scholars such as; Kyule and Ngugi (2014). Looked at the Influence of capital structure on leverage of small and medium size enterprises in Kenya, Using descriptive survey design and regression analysis model with 430 SMEs participating in the survey, established that there is positive relationship between the level of leverage and the firms size. Yuba and Zubairu (2015), looking at the impact of banking sector credit on the growth of small and medium enterprises in Nigeria. Using time series design and both descriptive and correlation matrix analysis, established that banking sector has significant impact on the growth of small and medium enterprises since it has a positive impact on inflation, exchange rate and trade debt. Abor (2005) studied the effect of capital structure on profitability of listed firms on Ghana stock exchange, using panel data and regression analysis. The result showed a significantly positive relation between the ratio of short term debt to total assets and ROE. However, a negative relationship between the ratio of long term debt to total assets and ROE was found. While, Asare and Angmor (2015), investigated the effect of debt financing on the profitability of SMEs in Accra metropolis, using secondary data from 50 SMEs from 2004-2013 and panel research design and multiple regression analysis, the result showed that short term loan ratio have a significant negative relationship with both profit margin ratio and return on assets. It also revealed a positive insignificant relation between long term loan ratio and profit margin but an insignificant negative relation was established with return on assets.

#### 4.5.2 Correlation between Short-term loan and Return on Equity.

**Table 4.10: Correlation between Short-term loan and Return on Equity**

		Short term loan	ROE
Short term loan	Pearson Correlation	1.000	
	Sig. (2-tailed)		
	N	400	
ROE	Pearson Correlation	-.694**	1.000
	Sig. (2-tailed)	.000	
	N	400	400

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

There was a significant moderate negative relationship between short-term loan and return on equity  $r=-0.694$   $p<0.001$ . This meant that as short-term loan increases, return on equity decreases.

#### 4.5.3 Correlation between Short-term loan and Net Profit Margin.

**Table 4.11: Correlation between Short-term loan and Net Profit Margin**

		Short term loan	Net Profit Margin
Short term loan	Pearson Correlation	1.000	
	Sig. (2-tailed)		
	N	400	
Net Profit Margin	Pearson Correlation	.186**	1.000
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Research data 2017.

The correlation analysis between short term loan and net profit revealed that there was a significant weak positive relationship between short-term loan and net profit margin,  $r=0.186$   $p<0.001$ . This meant that as short-term loan increases, Net Profit Margin also increases. But the available data from different scholars indicates that; Dube (2013) studied the impact of debt financing on productivity of SMEs: A case study of SMEs in Masvingo urban. Using a sample of 80 SMEs and secondary data from the financial reports with correlation and regression analysis, the findings showed that debt finance had a positive impact on productivity of SMEs. A lagathurai (2013) examined capital structure and financial performance: A study of listed trading companies in Srilanka. The findings revealed that debt ratio is negatively correlated with net profit, return on equity and earnings per share. Asare and Angmor (2015), investigated the effect of debt financing on the profitability of SMEs in Accra metropolis, using secondary data from 50 SMEs from 2004-2013 and panel research design and multiple regression analysis, the result showed that short term loan ratio have a significant negative relationship with both profit margin ratio and return on assets. It also revealed a positive insignificant relation between long term loan ratio and profit margin but an insignificant negative relation was established with return on assets.

#### 4.6 Regression Analysis.

**Table 4.12: Regression Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	SE	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	.384	.030		12.603	.000	.324	.444		
Short term loan	2.268	.000	.743	20.015	.000	.000	.000	.866	1.155
Accounts payable	2.347	.000	.495	13.351	.000	.000	.000	.866	1.155

a. Dependent Variable: Return on Asset

Source: Research data 2017.

$$y = \alpha + \beta_1 \chi_1 + \beta_2 \chi_2 + \dots + \epsilon; \text{ Newell, Elmore \& Walker (2012).}$$

Substitutes

$$y = 0.384 + 2.268 \chi_1 + 2.347 \chi_2 + 0.030$$

Holding other factors constant; if short term loan increases by one unit the firms performance will go up by 2.268 units.

Holding other factors constant; if accounts payable increases by one unit the firms performance will go up by 2.347.

#### 4.7 Hypothesis Testing

$H_{01}$ : Account payable has no significant effect on financial performance of Small and medium enterprises

The p-value  $p < 0.001$ , CI=95%, we therefore reject the  $H_{01}$  that account payable has no significant effect on financial performance of Small and medium enterprises. We adopt the  $H_1$  that account payable has a significant effect on financial performance of Small and medium enterprises.

## ANOVA

**Table 4.13: ANOVAs**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	874.235	7	124.891	15.414	.000
Within Groups	3176.241	392	8.103		
<b>Total</b>	<b>4050.476</b>	<b>399</b>			

Source: Research Data 2017

$H_{02}$ : Short term loans has no significant effect on financial performance of small and medium enterprises

The p-value  $p < 0.001$ , CI=95%, we therefore reject the  $H_{02}$  that Short term loans has no significant effect on financial performance of small and medium enterprises. We adopt the  $H_2$  that Short term loans has a significant effect on financial performance of small and medium enterprises.

## ANOVA

**Table 4.14: ANOVAs**

	<b>Sum of squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	2351.265	13	180.867	41.086	.000
Within Groups	1699.211	386	4.402		
<b>Total</b>	<b>4050.476</b>	<b>399</b>			

Source: Research data 2017.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION.**

#### **5.1 Introduction**

This chapter presented the summary of key findings, which were set out in order with the study objectives. The objective of the study was: to determine the effect of short term debt financing on financial performance of SMEs in Bondo sub county.

#### **5.2 Summary**

The study established that financial performance of SMEs in Bondo as presented by ROA showed a significant weak positive relationship with accounts payable. While, it indicates a significant moderate positive relationship with ROE, it also shows that account payable has a moderate negative correlation with net profit margin. Over ally, the study showed that as accounts payable increases the performance of SMEs also increases.

Whereas, short term loan showed a significant moderate positive relationship with ROA, it indicates a significant moderate negative relationship with ROE and a significant weak positive relationship with net profit margin. But the study established that as the short term loan increases the performance of SMEs also increases.

#### **5.3 Conclusion**

In light of the findings, the study concludes that accounts payable and short term loans are important in explaining financial performance of SMEs in Bondo Sub County because there is significant association between accounts payable, short term loan and financial performance of SMEs.

Therefore, short term debt financing has a potential of assisting SMEs to boast their performance since short term debt financing are not open to fluctuations that is economic conditions that changes the cost of borrowing adversely.

#### **5.4 Recommendation**

This research study has revealed that short term debt financing plays a significant role in financial performance of SMEs. Therefore, SMEs should be encouraged that short term loans are progressive and are good in enhancing performance of their enterprises. The

financial institutions should also be encouraged to advance short term loans to SMEs at affordable rates to encourage many SMEs to seek for loans.

### **5.5 Limitations of the Study**

A majority of the SMEs are keeping incomplete records and therefore more time consuming in analyzing the information and some managers were relying on their memory for certain information. There was also a challenge of financial mix that is the managers are not able to separate their funds and the business funds.

### **5.6 Suggestions for Further Research**

The researcher suggests that similar study should be done in other regions of the county for comparison purposes. The study should also be conducted in larger firms / organizations to allow for generalization of findings.

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## APPENDICES

### Appendix I: Secondary Data Schedule

#### Instructions:

Kindly fill in the questionnaire where necessary

The information will be used for academic purposes only and will be treated with confidentiality

#### SECTION A: Demographic information

##### 1. Gender

Male ( ) Female: ( )

##### 2. Age:

Between 11-20( )

Between 21-30 ( )

Between 31-40 ( )

Between 41-50 ( )

51 and above ( )

##### 3. Type of Business

General shop ( )

Mpesa ( )

Hardware ( )

Hotels ( )

Fish vendors ( )

##### 4. Age of Business

#### SECTION B: Loan able status/Credit position

##### 5. Frequency of loan receipt annually

	Year	Response Yes or No	
		Yes	No
1	2015		
2	2016		
3	2017		
	Total		

## 6. Annual credit volume

From the following credit ranges indicate your credit volume as offered by your lender financial institution

Year	R1			
2015				
2016				
2017				

## 7. Repayment Status

State the repayment status of the received credits

Year of issue	Enquiry	Response	Frequency
2015	FR in Year of issue		
	PR in Year of issue		
	FR in 2 <sup>nd</sup> Year of issue		
	Unpaid		
2016	FR in Year of issue		
	PR in Year of issue		
	FR in 2 <sup>nd</sup> Year of issue		
	Unpaid		
2017	FR in Year of issue		
	PR in Year of issue		
	FR in 2 <sup>nd</sup> Year of issue		
	Unpaid		

## SECTION C: Financial Performance of SMEs

The following table presents **Secondary data schedule** with respect to financial indicator of the SMEs

	Year	Profit margin	Return on Asset	Return on Equity
	2015			
	2016			
	2017			

## Appendix II: Raw Data

SHORT TERM LOAN	ACC. PAYABLE	NET INCOME	AVERAGE ASSET	ROA	ROE	EXPENSES	NET PROFIT	NET PROFIT MARGIN
13000	11000	210000	220243.9	0.95	16.15	3850	206150	0.98
17000	11000	135000	145125	0.93	7.94	3850	131150	0.97
11000	13000	210000	215000	0.98	19.09	4550	205450	0.98
17000	12000	180000	168260.87	1.07	10.59	4200	175800	0.98
17000	12000	195000	186333.33	1.05	11.47	4200	190800	0.98
16000	12000	210000	200666.67	1.05	13.13	4200	205800	0.98
12000	12000	150000	169736.84	0.88	12.5	4200	145800	0.97
16000	11000	285000	272333.33	1.05	17.81	3850	281150	0.99
16000	10000	195000	195000	1	12.19	3500	191500	0.98
15000	11000	210000	205227.27	1.02	14	3850	206150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
14000	12000	150000	161250	0.93	10.71	4200	145800	0.97
10000	11000	195000	226621.62	0.86	19.5	3850	191150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
15000	10000	210000	215000	0.98	14	3500	206500	0.98
12000	11000	330000	337857.14	0.98	27.5	3850	326150	0.99
15000	12000	315000	294456.52	1.07	21	4200	310800	0.99
14000	12000	195000	182282.61	1.07	13.93	4200	190800	0.98
19000	10000	210000	196304.35	1.07	11.05	3500	206500	0.98
15000	10000	195000	209625	0.93	13	3500	191500	0.98
13000	10000	210000	215000	0.98	16.15	3500	206500	0.98
12000	11000	195000	220657.89	0.88	16.25	3850	191150	0.98
12000	10000	210000	205227.27	1.02	17.5	3500	206500	0.98
17000	10000	195000	195000	1	11.47	3500	191500	0.98
17000	9000	180000	188780.49	0.95	10.59	3150	176850	0.98
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97
18000	9000	150000	161250	0.93	8.33	3150	146850	0.98
15000	11000	180000	184285.71	0.98	12	3850	176150	0.98
17000	9000	165000	173048.78	0.95	9.71	3150	161850	0.98
19000	10000	120000	125853.66	0.95	6.32	3500	116500	0.97
18000	9000	165000	154239.13	1.07	9.17	3150	161850	0.98
20000	7000	165000	168928.57	0.98	8.25	2450	162550	0.99
17000	10000	165000	168928.57	0.98	9.71	3500	161500	0.98
20000	11000	210000	188125	1.12	10.5	3850	206150	0.98
17000	10000	165000	157666.67	1.05	9.71	3500	161500	0.98
16000	13000	165000	165000	1	10.31	4550	160450	0.97
13000	10000	150000	179166.67	0.84	11.54	3500	146500	0.98
14000	10000	165000	177375	0.93	11.79	3500	161500	0.98
15000	10000	150000	169736.84	0.88	10	3500	146500	0.98
16000	8000	135000	145125	0.93	8.44	2800	132200	0.98

17000	10000	165000	173048.78	0.95	9.71	3500	161500	0.98
14000	12000	180000	184285.71	0.98	12.86	4200	175800	0.98
16000	11000	165000	168928.57	0.98	10.31	3850	161150	0.98
17000	12000	195000	171122.45	1.14	11.47	4200	190800	0.98
19000	10000	150000	146590.91	1.02	7.89	3500	146500	0.98
16000	10000	120000	139459.46	0.86	7.5	3500	116500	0.97
16000	10000	180000	180000	1	11.25	3500	176500	0.98
22000	12000	180000	157959.18	1.14	8.18	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
18000	12000	180000	164680.85	1.09	10	4200	175800	0.98
16000	12000	180000	172000	1.05	11.25	4200	175800	0.98
16000	12000	180000	172000	1.05	11.25	4200	175800	0.98
20000	12000	180000	164680.85	1.09	9	4200	175800	0.98
18000	12000	180000	154800	1.16	10	4200	175800	0.98
14000	12000	180000	180000	1	12.86	4200	175800	0.98
14000	12000	180000	164680.85	1.09	12.86	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98
14000	12000	180000	188780.49	0.95	12.86	4200	175800	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
16000	10000	180000	180000	1	11.25	3500	176500	0.98
15000	12000	180000	175909.09	1.02	12	4200	175800	0.98
12000	10000	180000	184285.71	0.98	15	3500	176500	0.98
15000	10000	180000	198461.54	0.91	12	3500	176500	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
20000	7000	180000	164680.85	1.09	9	2450	177550	0.99
20000	8000	180000	180000	1	9	2800	177200	0.98
20000	7000	180000	180000	1	9	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
20000	7000	180000	175909.09	1.02	9	2450	177550	0.99
22000	6000	180000	172000	1.05	8.18	2100	177900	0.99
18000	7000	180000	184285.71	0.98	10	2450	177550	0.99
22000	8000	180000	168260.87	1.07	8.18	2800	177200	0.98
18000	8000	180000	168260.87	1.07	10	2800	177200	0.98
20000	8000	180000	172000	1.05	9	2800	177200	0.98
22000	7000	180000	168260.87	1.07	8.18	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
20000	7000	180000	161250	1.12	9	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
15000	10000	180000	172000	1.05	12	3500	176500	0.98

15000	10000	180000	188780.49	0.95	12	3500	176500	0.98
16000	8000	180000	198461.54	0.91	11.25	2800	177200	0.98
16000	7000	180000	175909.09	1.02	11.25	2450	177550	0.99
21000	10000	180000	161250	1.12	8.57	3500	176500	0.98
24000	8000	210000	184285.71	1.14	8.75	2800	207200	0.99
14000	10000	180000	193500	0.93	12.86	3500	176500	0.98
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
14000	9000	195000	215000	0.91	13.93	3150	191850	0.98
18000	9000	180000	184285.71	0.98	10	3150	176850	0.98
20000	9000	180000	172000	1.05	9	3150	176850	0.98
16000	7000	180000	198461.54	0.91	11.25	2450	177550	0.99
18000	10000	180000	180000	1	10	3500	176500	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
16000	11000	150000	150000	1	9.38	3850	146150	0.97
15000	8000	120000	147428.57	0.81	8	2800	117200	0.98
15000	11000	150000	165384.62	0.91	10	3850	146150	0.97
18000	10000	150000	140217.39	1.07	8.33	3500	146500	0.98
17000	13000	150000	146590.91	1.02	8.82	4550	145450	0.97
17000	12000	150000	150000	1	8.82	4200	145800	0.97
14000	8000	135000	170735.29	0.79	9.64	2800	132200	0.98
16000	11000	195000	171122.45	1.14	12.19	3850	191150	0.98
15000	11000	210000	205227.27	1.02	14	3850	206150	0.98
13000	10000	210000	220243.9	0.95	16.15	3500	206500	0.98
14000	8000	180000	203684.21	0.88	12.86	2800	177200	0.98
18000	10000	210000	180600	1.16	11.67	3500	206500	0.98
22000	8000	180000	172000	1.05	8.18	2800	177200	0.98
24000	12000	180000	138214.29	1.3	7.5	4200	175800	0.98
18000	7000	180000	193500	0.93	10	2450	177550	0.99
18000	12000	180000	161250	1.12	10	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
16000	10000	150000	165384.62	0.91	9.38	3500	146500	0.98
13000	11000	210000	220243.9	0.95	16.15	3850	206150	0.98
17000	11000	135000	145125	0.93	7.94	3850	131150	0.97
11000	13000	210000	215000	0.98	19.09	4550	205450	0.98
17000	12000	180000	168260.87	1.07	10.59	4200	175800	0.98
17000	12000	195000	186333.33	1.05	11.47	4200	190800	0.98
16000	12000	210000	200666.67	1.05	13.13	4200	205800	0.98
12000	12000	150000	169736.84	0.88	12.5	4200	145800	0.97

16000	11000	285000	272333.33	1.05	17.81	3850	281150	0.99
16000	10000	195000	195000	1	12.19	3500	191500	0.98
15000	11000	210000	205227.27	1.02	14	3850	206150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
14000	12000	150000	161250	0.93	10.71	4200	145800	0.97
10000	11000	195000	226621.62	0.86	19.5	3850	191150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
15000	10000	210000	215000	0.98	14	3500	206500	0.98
12000	11000	330000	337857.14	0.98	27.5	3850	326150	0.99
15000	12000	315000	294456.52	1.07	21	4200	310800	0.99
14000	12000	195000	182282.61	1.07	13.93	4200	190800	0.98
19000	10000	210000	196304.35	1.07	11.05	3500	206500	0.98
15000	10000	195000	209625	0.93	13	3500	191500	0.98
13000	10000	210000	215000	0.98	16.15	3500	206500	0.98
12000	11000	195000	220657.89	0.88	16.25	3850	191150	0.98
12000	10000	210000	205227.27	1.02	17.5	3500	206500	0.98
17000	10000	195000	195000	1	11.47	3500	191500	0.98
17000	9000	180000	188780.49	0.95	10.59	3150	176850	0.98
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97
18000	9000	150000	161250	0.93	8.33	3150	146850	0.98
15000	11000	180000	184285.71	0.98	12	3850	176150	0.98
17000	9000	165000	173048.78	0.95	9.71	3150	161850	0.98
19000	10000	120000	125853.66	0.95	6.32	3500	116500	0.97
18000	9000	165000	154239.13	1.07	9.17	3150	161850	0.98
20000	7000	165000	168928.57	0.98	8.25	2450	162550	0.99
17000	10000	165000	168928.57	0.98	9.71	3500	161500	0.98
20000	11000	210000	188125	1.12	10.5	3850	206150	0.98
17000	10000	165000	157666.67	1.05	9.71	3500	161500	0.98
16000	13000	165000	165000	1	10.31	4550	160450	0.97
13000	10000	150000	179166.67	0.84	11.54	3500	146500	0.98
14000	10000	165000	177375	0.93	11.79	3500	161500	0.98
15000	10000	150000	169736.84	0.88	10	3500	146500	0.98
16000	8000	135000	145125	0.93	8.44	2800	132200	0.98
17000	10000	165000	173048.78	0.95	9.71	3500	161500	0.98
14000	12000	180000	184285.71	0.98	12.86	4200	175800	0.98
16000	11000	165000	168928.57	0.98	10.31	3850	161150	0.98
17000	12000	195000	171122.45	1.14	11.47	4200	190800	0.98
19000	10000	150000	146590.91	1.02	7.89	3500	146500	0.98
16000	10000	120000	139459.46	0.86	7.5	3500	116500	0.97
16000	10000	180000	180000	1	11.25	3500	176500	0.98
22000	12000	180000	157959.18	1.14	8.18	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
18000	12000	180000	164680.85	1.09	10	4200	175800	0.98

16000	12000	180000	172000	1.05	11.25	4200	175800	0.98
16000	12000	180000	172000	1.05	11.25	4200	175800	0.98
20000	12000	180000	164680.85	1.09	9	4200	175800	0.98
18000	12000	180000	154800	1.16	10	4200	175800	0.98
14000	12000	180000	180000	1	12.86	4200	175800	0.98
14000	12000	180000	164680.85	1.09	12.86	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98
14000	12000	180000	188780.49	0.95	12.86	4200	175800	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
16000	10000	180000	180000	1	11.25	3500	176500	0.98
15000	12000	180000	175909.09	1.02	12	4200	175800	0.98
12000	10000	180000	184285.71	0.98	15	3500	176500	0.98
15000	10000	180000	198461.54	0.91	12	3500	176500	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
20000	7000	180000	164680.85	1.09	9	2450	177550	0.99
20000	8000	180000	180000	1	9	2800	177200	0.98
20000	7000	180000	180000	1	9	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
20000	7000	180000	175909.09	1.02	9	2450	177550	0.99
22000	6000	180000	172000	1.05	8.18	2100	177900	0.99
18000	7000	180000	184285.71	0.98	10	2450	177550	0.99
22000	8000	180000	168260.87	1.07	8.18	2800	177200	0.98
18000	8000	180000	168260.87	1.07	10	2800	177200	0.98
20000	8000	180000	172000	1.05	9	2800	177200	0.98
22000	7000	180000	168260.87	1.07	8.18	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
20000	7000	180000	161250	1.12	9	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
15000	10000	180000	172000	1.05	12	3500	176500	0.98
15000	10000	180000	188780.49	0.95	12	3500	176500	0.98
16000	8000	180000	198461.54	0.91	11.25	2800	177200	0.98
16000	7000	180000	175909.09	1.02	11.25	2450	177550	0.99
21000	10000	180000	161250	1.12	8.57	3500	176500	0.98
24000	8000	210000	184285.71	1.14	8.75	2800	207200	0.99
14000	10000	180000	193500	0.93	12.86	3500	176500	0.98
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
14000	9000	195000	215000	0.91	13.93	3150	191850	0.98
18000	9000	180000	184285.71	0.98	10	3150	176850	0.98
20000	9000	180000	172000	1.05	9	3150	176850	0.98

16000	7000	180000	198461.54	0.91	11.25	2450	177550	0.99
18000	10000	180000	180000	1	10	3500	176500	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
16000	11000	150000	150000	1	9.38	3850	146150	0.97
15000	8000	120000	147428.57	0.81	8	2800	117200	0.98
15000	11000	150000	165384.62	0.91	10	3850	146150	0.97
18000	10000	150000	140217.39	1.07	8.33	3500	146500	0.98
17000	13000	150000	146590.91	1.02	8.82	4550	145450	0.97
17000	12000	150000	150000	1	8.82	4200	145800	0.97
14000	8000	135000	170735.29	0.79	9.64	2800	132200	0.98
16000	11000	195000	171122.45	1.14	12.19	3850	191150	0.98
15000	11000	210000	205227.27	1.02	14	3850	206150	0.98
13000	10000	210000	220243.9	0.95	16.15	3500	206500	0.98
14000	8000	180000	203684.21	0.88	12.86	2800	177200	0.98
18000	10000	210000	180600	1.16	11.67	3500	206500	0.98
22000	8000	180000	172000	1.05	8.18	2800	177200	0.98
24000	12000	180000	138214.29	1.3	7.5	4200	175800	0.98
18000	7000	180000	193500	0.93	10	2450	177550	0.99
18000	12000	180000	161250	1.12	10	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
16000	10000	150000	165384.62	0.91	9.38	3500	146500	0.98
13000	11000	210000	220243.9	0.95	16.15	3850	206150	0.98
17000	11000	135000	145125	0.93	7.94	3850	131150	0.97
11000	13000	210000	215000	0.98	19.09	4550	205450	0.98
17000	12000	180000	168260.87	1.07	10.59	4200	175800	0.98
17000	12000	195000	186333.33	1.05	11.47	4200	190800	0.98
16000	12000	210000	200666.67	1.05	13.13	4200	205800	0.98
12000	12000	150000	169736.84	0.88	12.5	4200	145800	0.97
16000	11000	285000	272333.33	1.05	17.81	3850	281150	0.99
16000	10000	195000	195000	1	12.19	3500	191500	0.98
15000	11000	210000	205227.27	1.02	14	3850	206150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
14000	12000	150000	161250	0.93	10.71	4200	145800	0.97
10000	11000	195000	226621.62	0.86	19.5	3850	191150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
15000	10000	210000	215000	0.98	14	3500	206500	0.98
12000	11000	330000	337857.14	0.98	27.5	3850	326150	0.99
15000	12000	315000	294456.52	1.07	21	4200	310800	0.99

14000	12000	195000	182282.61	1.07	13.93	4200	190800	0.98
19000	10000	210000	196304.35	1.07	11.05	3500	206500	0.98
15000	10000	195000	209625	0.93	13	3500	191500	0.98
13000	10000	210000	215000	0.98	16.15	3500	206500	0.98
12000	11000	195000	220657.89	0.88	16.25	3850	191150	0.98
12000	10000	210000	205227.27	1.02	17.5	3500	206500	0.98
17000	10000	195000	195000	1	11.47	3500	191500	0.98
17000	9000	180000	188780.49	0.95	10.59	3150	176850	0.98
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97
18000	9000	150000	161250	0.93	8.33	3150	146850	0.98
15000	11000	180000	184285.71	0.98	12	3850	176150	0.98
17000	9000	165000	173048.78	0.95	9.71	3150	161850	0.98
19000	10000	120000	125853.66	0.95	6.32	3500	116500	0.97
18000	9000	165000	154239.13	1.07	9.17	3150	161850	0.98
20000	7000	165000	168928.57	0.98	8.25	2450	162550	0.99
17000	10000	165000	168928.57	0.98	9.71	3500	161500	0.98
20000	11000	210000	188125	1.12	10.5	3850	206150	0.98
17000	10000	165000	157666.67	1.05	9.71	3500	161500	0.98
16000	13000	165000	165000	1	10.31	4550	160450	0.97
13000	10000	150000	179166.67	0.84	11.54	3500	146500	0.98
14000	10000	165000	177375	0.93	11.79	3500	161500	0.98
15000	10000	150000	169736.84	0.88	10	3500	146500	0.98
16000	8000	135000	145125	0.93	8.44	2800	132200	0.98
17000	10000	165000	173048.78	0.95	9.71	3500	161500	0.98
14000	12000	180000	184285.71	0.98	12.86	4200	175800	0.98
16000	11000	165000	168928.57	0.98	10.31	3850	161150	0.98
17000	12000	195000	171122.45	1.14	11.47	4200	190800	0.98
19000	10000	150000	146590.91	1.02	7.89	3500	146500	0.98
16000	10000	120000	139459.46	0.86	7.5	3500	116500	0.97
16000	10000	180000	180000	1	11.25	3500	176500	0.98
22000	12000	180000	157959.18	1.14	8.18	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
18000	12000	180000	164680.85	1.09	10	4200	175800	0.98
16000	12000	180000	172000	1.05	11.25	4200	175800	0.98
16000	12000	180000	172000	1.05	11.25	4200	175800	0.98
20000	12000	180000	164680.85	1.09	9	4200	175800	0.98
18000	12000	180000	154800	1.16	10	4200	175800	0.98
14000	12000	180000	180000	1	12.86	4200	175800	0.98
14000	12000	180000	164680.85	1.09	12.86	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98

18000	10000	180000	180000	1	10	3500	176500	0.98
14000	12000	180000	188780.49	0.95	12.86	4200	175800	0.98
18000	10000	180000	180000	1	10	3500	176500	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
16000	10000	180000	180000	1	11.25	3500	176500	0.98
15000	12000	180000	175909.09	1.02	12	4200	175800	0.98
12000	10000	180000	184285.71	0.98	15	3500	176500	0.98
15000	10000	180000	198461.54	0.91	12	3500	176500	0.98
16000	10000	180000	184285.71	0.98	11.25	3500	176500	0.98
20000	7000	180000	164680.85	1.09	9	2450	177550	0.99
20000	8000	180000	180000	1	9	2800	177200	0.98
20000	7000	180000	180000	1	9	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
20000	7000	180000	175909.09	1.02	9	2450	177550	0.99
22000	6000	180000	172000	1.05	8.18	2100	177900	0.99
18000	7000	180000	184285.71	0.98	10	2450	177550	0.99
22000	8000	180000	168260.87	1.07	8.18	2800	177200	0.98
18000	8000	180000	168260.87	1.07	10	2800	177200	0.98
20000	8000	180000	172000	1.05	9	2800	177200	0.98
22000	7000	180000	168260.87	1.07	8.18	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
20000	7000	180000	161250	1.12	9	2450	177550	0.99
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
15000	10000	180000	172000	1.05	12	3500	176500	0.98
15000	10000	180000	188780.49	0.95	12	3500	176500	0.98
16000	8000	180000	198461.54	0.91	11.25	2800	177200	0.98
16000	7000	180000	175909.09	1.02	11.25	2450	177550	0.99
21000	10000	180000	161250	1.12	8.57	3500	176500	0.98
24000	8000	210000	184285.71	1.14	8.75	2800	207200	0.99
14000	10000	180000	193500	0.93	12.86	3500	176500	0.98
18000	8000	180000	184285.71	0.98	10	2800	177200	0.98
14000	9000	195000	215000	0.91	13.93	3150	191850	0.98
18000	9000	180000	184285.71	0.98	10	3150	176850	0.98
20000	9000	180000	172000	1.05	9	3150	176850	0.98
16000	7000	180000	198461.54	0.91	11.25	2450	177550	0.99
18000	10000	180000	180000	1	10	3500	176500	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
16000	11000	150000	150000	1	9.38	3850	146150	0.97
15000	8000	120000	147428.57	0.81	8	2800	117200	0.98
15000	11000	150000	165384.62	0.91	10	3850	146150	0.97
18000	10000	150000	140217.39	1.07	8.33	3500	146500	0.98
17000	13000	150000	146590.91	1.02	8.82	4550	145450	0.97
17000	12000	150000	150000	1	8.82	4200	145800	0.97
14000	8000	135000	170735.29	0.79	9.64	2800	132200	0.98

16000	11000	195000	171122.45	1.14	12.19	3850	191150	0.98
15000	11000	210000	205227.27	1.02	14	3850	206150	0.98
13000	10000	210000	220243.9	0.95	16.15	3500	206500	0.98
14000	8000	180000	203684.21	0.88	12.86	2800	177200	0.98
18000	10000	210000	180600	1.16	11.67	3500	206500	0.98
22000	8000	180000	172000	1.05	8.18	2800	177200	0.98
24000	12000	180000	138214.29	1.3	7.5	4200	175800	0.98
18000	7000	180000	193500	0.93	10	2450	177550	0.99
18000	12000	180000	161250	1.12	10	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
16000	12000	180000	175909.09	1.02	11.25	4200	175800	0.98
18000	12000	180000	172000	1.05	10	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
18000	12000	180000	168260.87	1.07	10	4200	175800	0.98
16000	10000	150000	165384.62	0.91	9.38	3500	146500	0.98
13000	11000	210000	220243.9	0.95	16.15	3850	206150	0.98
17000	11000	135000	145125	0.93	7.94	3850	131150	0.97
11000	13000	210000	215000	0.98	19.09	4550	205450	0.98
17000	12000	180000	168260.87	1.07	10.59	4200	175800	0.98
17000	12000	195000	186333.33	1.05	11.47	4200	190800	0.98
16000	12000	210000	200666.67	1.05	13.13	4200	205800	0.98
12000	12000	150000	169736.84	0.88	12.5	4200	145800	0.97
16000	11000	285000	272333.33	1.05	17.81	3850	281150	0.99
16000	10000	195000	195000	1	12.19	3500	191500	0.98
15000	11000	210000	205227.27	1.02	14	3850	206150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
14000	12000	150000	161250	0.93	10.71	4200	145800	0.97
10000	11000	195000	226621.62	0.86	19.5	3850	191150	0.98
16000	12000	195000	190568.18	1.02	12.19	4200	190800	0.98
15000	10000	210000	215000	0.98	14	3500	206500	0.98
12000	11000	330000	337857.14	0.98	27.5	3850	326150	0.99
15000	12000	315000	294456.52	1.07	21	4200	310800	0.99
14000	12000	195000	182282.61	1.07	13.93	4200	190800	0.98
19000	10000	210000	196304.35	1.07	11.05	3500	206500	0.98
15000	10000	195000	209625	0.93	13	3500	191500	0.98
13000	10000	210000	215000	0.98	16.15	3500	206500	0.98
12000	11000	195000	220657.89	0.88	16.25	3850	191150	0.98
12000	10000	210000	205227.27	1.02	17.5	3500	206500	0.98
17000	10000	195000	195000	1	11.47	3500	191500	0.98
17000	9000	180000	188780.49	0.95	10.59	3150	176850	0.98
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97
16000	10000	105000	125416.67	0.84	6.56	3500	101500	0.97

18000	9000	150000	161250	0.93	8.33	3150	146850	0.98
15000	11000	180000	184285.71	0.98	12	3850	176150	0.98
17000	9000	165000	173048.78	0.95	9.71	3150	161850	0.98
19000	10000	120000	125853.66	0.95	6.32	3500	116500	0.97
18000	9000	165000	154239.13	1.07	9.17	3150	161850	0.98
20000	7000	165000	168928.57	0.98	8.25	2450	162550	0.99
17000	10000	165000	168928.57	0.98	9.71	3500	161500	0.98