



EFFECT OF FINANCIAL MANAGEMENT PRACTICES ON PROFITABILITY OF MANUFACTURING COMPANIES IN KOODBUUR DISTRICT IN HARGEISA, SOMALILAND

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Abstract

Manufacturing companies are vital in driving economic growth by utilizing vast resources and manpower, making their stability essential for Somaliland's economic development. This study examined the effect of financial management practices on the profitability of manufacturing companies in Koodbuur District, Hargeisa. Using a descriptive research design and simple random sampling, 92 companies were selected. Logistic regression analysis conducted through SPSS revealed mixed results. Capital budgeting techniques were statistically significant ($Exp(B) = 0.615$, $p = 0.010$), with each unit increase associated with decreased profitability odds. In contrast, working capital management ($Exp(B) = 0.946$, $p = 0.566$) and capital structure management ($Exp(B) = 1.059$, $p = 0.619$) were statistically insignificant, indicating minimal impact on profitability. The study recommends implementing systems to provide updated information on capital budgeting techniques, including payback period, net present value, and profitability index, to improve cash flow and decision-making. Additionally, manufacturing companies should monitor market trends to adapt their offerings and mitigate risks associated with capital budgeting. Specialized training and development programs are suggested to enhance financial

management knowledge, aligning with Somaliland Vision 2030. This vision aims to develop a robust private sector that drives investment, employment, and sustainable livelihoods, reinforcing economic stability and peace.

Keywords: Financial Management Practices, Working Capital Management, Capital Budgeting Technique, Capital Structure Management, Profitability, Manufacturing Companies

INTRODUCTION

Background of the Study

Manufacturing companies are the second-most important sector for economic growth in developed Manufacturing sector plays a significant role in economic growth and sustainable development, and a huge number of investors are investing in manufacturing companies (Hossain, 2020). In Nigeria, the manufacturing industries are the second biggest contributor to GDP, only behind the agricultural sector, and the firms listed give a very good representation of the economy (Ifeduni & Charles, 2018). In Kenya, as stated by Namukula (2021), the manufacturing sector has been a big focus in the country's development agenda, yet it has stagnated at a 10% contribution to the GDP over the years. In Somaliland manufacturing companies play a key role in development. The profitability of these companies is key to the development of the Somaliland economy at large (NDP, 2015). The aim of this study was to determine the effect of financial management practices on the profitability of manufacturing companies in Hargeisa, Somaliland.

The manufacturing sector in Somaliland is currently at 30% capacity contribution to overall economy (Ibrahim, 2018). According to Ministry of National Planning and Development (2011) Somaliland has a relatively limited manufacturing base. Bottling and packaging plants make up the majority of the minor manufacturing companies. The government is fully aware of this industry's potential to boost employment and spur the growth required to achieve Vision 2030. Despite the fact that manufacturing companies play a crucial role in Somaliland economy, they are often faced with a number of challenges. These challenges facing manufacturing companies, which gradually lead to decline in profitability in manufacturing which is alarming because many of them die prematurely (National Development Plan, 2017). The obstacles and challenges faced by manufacturing companies have reduced their expected role in the growth and development of the country's economy (Mohamed, 2014). Furthermore, the researcher observed in Koodbuur District that over 20 manufacturing companies have experienced a decline in profitability with some companies collapsing in businesses such as Yamani Bakery and Ayaan Bakery. Hence this study sought to determine the effect of financial management

practices on profitability of manufacturing companies in Koodbuur district in Hargeisa, Somaliland.

The components of financial management practice are working capital management, capital budgeting technique and capital structure management (Yohanes et al., 2018). According to Kitonga (2013) typical financial management practices in organizations include an accounting information system, fixed assets management, working capital management, financial reporting and analysis, capital structure management. These components of financial management practices are supported by Kilonzo Jennifer and Dennis (2015). In this study financial management practices were broken down into working capital management, capital budgeting technique, and capital structure management. Working capital management was measured as creditor management, debtor management, and inventory management (Bagh, Nazir, Khan, Khan and Razzaq, 2016). Capital budgeting technique was measured as pay pack period, present value, and profitability index (Namukula, 2021). While capital structure management was measured as debt financing and equity financing (Yegon et al., 2014).

Working capital management is a business approach that involves keeping an eye on and making the best use of a company's existing assets and obligations (Kiymaz, 2023). The process of evaluating and prioritizing enterprises with the aim of boosting owners' value is known as capital budgeting (Yohanes et al., 2018). Working capital management also defined is the best possible mixture of working capital elements such as current asset and current liability in such a way, which in turn heightens the value of shareholder (Sarniloglu and Demirgunes, 2008). Capital budgeting strategies are methods that companies employ to assess possible large-scale projects or investments, according to Namukula (2021). The choice made by the company to allocate its current money as effectively as possible to long-term projects in expectation of an anticipated flow of benefits over a number of years is known as the capital budgeting strategy (Onuorah, 2019). On the other hand, capital budgeting technique is defined as the process of evaluating and prioritizing enterprises with the aim of raising the value of owners is known as the capital budgeting technique (Mansaray, 2019). Capital structure management is the particular combination of debt and equity used by a company to finance its overall operations and growth (Yegon et al., 2014). However, capital structure management refers to the method by which a business decides how much debt and equity to utilize to fund its operations and investments, among other decisions about the capital composition (Brealey, Myers & Allen, 2017). Capital structure is defined as the ideal mix of debt and equity financing that maximizes shareholder value while minimizing capital costs and financial risk (Ross, Westerfield & Jordan, 2019). Thus, this study sought to determine the effect of financial

management practices on profitability of manufacturing companies in Koodbuur district in Hargeisa, Somaliland.

Profitability is the ability of a company to earn profit (Hossain, 2021). On the other hand, Liuspita and Purwanto (2019) defined profitability as the achievement of the economic success of the company, which is generated after paying all costs directly related to income. Maximization of profitability is the main objective of each and every business, according to Dimitrić, Tomas, and Arbula (2019). Return on assets (ROA) and sales growth are indicators of how efficiently and effectively a company's assets are utilized to generate revenue. The profitability indicators of this study are based on previous studies, as stated, Fareed, Ali, Shahzad, Nazir, and Ullah (2016) concluded that return on assets and sales growth are measures of the profitability of companies. Many researchers have used return on assets and revenue growth as measures of profitability, including Khan (2020) and Yazdanfar (2013). This study used revenue growth as measures of profitability as developed by (Santos & Brito, 2012) and applied by (Ahmed, I. I., & Wafula, N.W. (2023). Thus, this study sought to determine the effect of financial management practices on the profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.

Statement of the Problem

Manufacturing companies are crucial to the economies of many nations. Manufacturing development is still important in the twenty-first century for developing nations who are attempting to catch up to more developed economies and raise the living standards of their citizens (Naudé and Szirmai 2012). The higher profitability in manufacturing enterprises leads to higher economic development. Inversely, less profitability of manufacturing companies leads to poor economy, whereas manufacturing companies are largely raising and extending sources according to specified budget plans (Mwavu, 2018).

Manufacturing companies in Somaliland are facing profitability challenges and some companies closing down like Yamani Bakery and Ayaan Bakery which could have contributed to the growth of the Somaliland economy. These constrains faced by manufacturing companies which slowly declines profitability (Ibrahim, 2018). A number of studies have been done in this scope inclusive of (Ehi-Oshio, Adeyemi & Enofe, 2013; Hossain, 2020; Akben-Selcuk, 2016; Obara & Muturi, 2019). However, these studies have been conducted in different context from Somaliland. The researcher attempted to address the gap by researching on the effect of financial management practices on the profitability of manufacturing companies in Koodbuur district in Hargeisa, Somaliland.

Research Objectives

General Research Objectives

The general objective of this study was to determine the effect of financial management practices on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.

Specific Research Objectives

1. To determine the effect of working capital management on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.
2. To investigate the effect of capital budgeting technique on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.
3. To examine the effect of capital structure management on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.

Research Hypothesis

1. Working capital management has no significant effect on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.
2. Capital budgeting technique has no significant effect on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.
3. Capital structure management has no significant effect on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.

EMPIRICAL REVIEW

This section reviews relevant empirical literature that supports the research problem, ensuring that the study is informed by previous research in the field.

Working Capital Management and Profitability

Kiyamaz (2023) investigated the effect of working capital management on the profitability of firms in Pakistan. The target population of the study was listed firms, and the study design was quantitative. The sample size of listed firms was 45 in random selection as a sample technique. The model used was multiple regression model. The study found out that working capital management has a significant effect on firms' profitability in the food sector in Pakistan. Alipour (2011) examined the effect of working capital management on profitability of companies in Iran. The target population of the study was 2628 listed companies. The sample technique used by the author was stratified sampling, which took in a sample of 1063 companies. The

research design was quantitative, and the models used in the study were multiple regression and Pearson correlation. Although the study was conducted in Iran, the result of the study was that working capital management has a significant relationship with the profitability of companies in Iran.

Danuletiu (2010) examined the effect of working capital management on the profitability of companies in Nigeria. The target population of the study was companies in Alba County. The model of the study was Pearson correlation analysis, and it used a sample of 20 companies that were selected randomly. Also, the study's design was quantitative. In addition, the results of the study showed a significant relationship between working capital management and the profitability of companies in Nigeria.

Ponsian (2014) investigated the effect of working capital management on the profitability of manufacturing companies in Tanzania. Data is analyzed using a quantitative research design based on Pearson's correlation and regression analysis (or ordinary least squares). The target population of the study was six manufacturing companies listed in Tanzania. The author used random selection in three of the listed companies as a sample technique to find that the way working capital is managed was significant effect on the profitability of companies in Tanzania.

Capital Budgeting Technique and Profitability

According to Imegi and Nwokoye (2015), they investigated the effect of capital budgeting techniques on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange in Kenya. Descriptive statistics were used to analyze quantitative data by way of tables, figures, charts, and percentages. Both descriptive and longitudinal research designs were employed. The target population of the study was made up of seven manufacturing and allied firms listed on the (NSE). Structured questionnaires were used to collect primary data, which was administered to staff in charge of risk, investment, or finance. Additionally, secondary data, which constitutes the published financial statements, was downloaded from the firm's website. The secondary data covered a period of 5 years, from 2016 to 2020. Data analysis was carried out using the Microsoft Excel package and the Statistical Package of Social Sciences (SPSS). The study also found that capital budgeting techniques do not significantly influence the profitability of manufacturing and allied firms listed at the NSE in Kenya.

According to Nyarombe, Kirui, Isaac, and Gwaro (2015), they investigated the impact of capital budgeting techniques on the profitability of listed companies in Eldoret town, Kenya. The study used a survey design with a target population of 110 top-level managers, departmental managers, and supervisors of selected companies found in Eldoret town. It used stratified sampling techniques to sample a sample size of 85, which is 78% of the targeted population.

Questionnaires and an interview schedule were used to collect data from the respondents. Descriptive statistics were used to analyze the data. The indicators of profitability projects in capital budgeting techniques include positive net present value. The model used in the study was a logistic regression model, while the result of the study was that the capital budgeting technique has a significant impact on the profitability of listed companies in Eldoret town, Kenya.

On the other hand, Mansaray (2019) examined the impact of capital budgeting techniques on the profitability of commercial banks in Sierra Leone. The study design adopted in this study was qualitative as well as quantitative in research methodology. A questionnaire was developed to get the opinions of employees working in 11 commercial banks in Sierra Leone. The results obtained from 187 employees show that the implementation of the payback period technique in capital budgeting is highly correlated with profitability in commercial banks, followed by three other techniques except for the internal rate of return technique, which was negative and insignificant in both the correlation and multiple regression results.

Capital Structure Management and Profitability

As stated, Yegon, Cheruiyot, Sang and Cheruiyot (2014) investigated the relationship between capital structure and the profitability of banking sectors in Kenya. By using panel data extracted from the financial statements of the bank sectors listed on the Nairobi Stock Exchange from 2004–2012 based on a panel regression model. Descriptive statistics of the variables used in analysis are presented to look at the nature and validity of the data. The authors have taken 11 firms in the banking industry as a sample. The sample firms are listed on the Nairobi Stock Exchange and were selected by the researchers on the basis of a random sampling technique. The study found that a significant positive relationship exists between short-term debt and profitability and a statistically significant negative relationship between long-term debt and profitability. The results are partially consistent with the previous studies, as the negative relationship between long-term debt and firm performance tends to favor the dominant pecking order theory.

Although Amoa-Gyarteng and Dhliwayo (2022) explored the impact of capital structure on the profitability of nascent small and medium enterprises in Ghana, the study samples 1106 (SMEs) that have been in operation for five years or less and are registered with the Ghana Enterprises Agency. Regression analysis was used to explore the relationship between capital structure and profitability as measured by return on assets (ROA) and return on equity (ROE). The research design of the study was descriptive statistics. The findings show that the equity and debt-to-equity ratios have significant positive relationships with both profitability metrics. On the other hand, the debt ratio was found to have a negative relationship with profitability. The

study suggests that nascent SMEs should use internal equity to be profitable and only use debt if it is used in conjunction with equity.

On the other hand, Erdoğan (2015) examined the effect of capital structure on the profitability of energy in American firms. A sample of 30 energy firms from American firms for a period of nine years from 2005 to 2013 was considered. Secondary data were collected from financial statements, which were taken from Mergent online. The study used a multiple regression model, which indicated that 10% of ROE and 34% of ROA were predicted by the independent variables. The research design used for the study was descriptive statistics. The findings also showed that total debt has a significant negative impact on ROE and ROA, while size in terms of sales has a significantly negative effect only on the ROE of American firms. However, short-term debt significantly has a positive influence on ROE. An insignificant, either negative or positive, relationship was observed between long-term debt, debt to equity, and size in terms of total assets and profitability. The author suggested addressing a longer period of time with a large sample size of firms. It would be more accurate if future studies included more independent variables, such as taxation and concentration.

RESEARCH METHODOLOGY

The study adopted a descriptive research design. The descriptive research design was chosen because it allows for a thorough understanding of the characteristics and effects of financial management practices on profitability, ensuring minimal bias and comprehensive data collection. The study used mean, standard deviation, correlation, and logistic regression to determine the effect of financial management practices on the profitability of manufacturing companies in Koodbuur district in Hargeisa, Somaliland. The study is based entirely on primary data, collected through questionnaires administered to individuals representing management, employees, and other relevant stakeholders from 120 manufacturing companies in the Koodbuur district of Hargeisa, Somaliland. In this study, a simple random sampling method was used to get the data. Correlation is a statistical method that determines the degree of relationship between two different variables (Maiwada & Okey, 2015). In statistics, logistic regression measures the relationship between a categorical dependent variable and more independent variables, which are usually continuous, by using probability scores as the predicted values of the dependent variable. Logistic regression is a statistical model that, in its basic form, uses a logistic function to model a binary dependent variable, although many more complex extensions exist (Hellevik, 2009). Logistic regression is the appropriate regression analysis to conduct when the

dependent variable is dichotomous (binary). Logistic regression is used to describe and explain the relationship between one dependent binary variable and one or more nominal, ordinal, interval, or ratio-level independent variables (Peng & Ingersoll, 2002). The logistic regression model for the study is as follows:

$$\ln(p/1-p) = [\beta_0 + \beta_1WCM + \beta_2CBT + \beta_3CSM]$$

Where:

P= Probability Value

β_0 =Constant or Intercept

WCM= Working Capital Management

CBT= Capital Budgeting Technique

CSM= Capital Structure Management

Table 1: Qualitative Measurements of Variables

| Category | Variable Name | Indicators | Measurement Tool |
|----------------------|------------------------------|--|--|
| Independent Variable | Working Capital Management | <ul style="list-style-type: none"> • Debtor management. • Creditor management. • Inventory management | 5-point Likert scale, and a composite of 10 items. |
| Independent Variable | Capital Budgeting Technique | <ul style="list-style-type: none"> • Payback period • Net present values • Profitability index | 5-point Likert scale, and a composite of 10 items. |
| Independent Variable | Capital Structure Management | <ul style="list-style-type: none"> • Debt financing • Equity financing | 5-point Likert scale, and a composite of 10 items. |
| Dependent Variable | Profitability | <ul style="list-style-type: none"> • Revenue growth | Binary Response |

RESULTS AND DISCUSSIONS

Descriptive Statistics

Descriptive Statistics on Working Capital Management

The research aimed to determine how the financial management practices effected on the profitability of manufacturing companies in koodbuur district in Hargeisa Somaliland. The table presents analysis from a survey involving 92 participants regarding working capital management practices and their effect on profitability in manufacturing companies. Each statement was rated on a scale of 1 to 5, where 1 represents strong disagreement and 5 indicates strong agreement. Mean and standard deviation (SD) values are provided for each statement to assess the level of consensus among respondents.

Table 2: Working Capital Management and Profitability

| STATEMENT | N | Mean | SD |
|--|-----------|-------------|-------------|
| We have a credit control policy that includes credit checks for all customers prior to offering credit. | 92 | 4.60 | .493 |
| We set credit limits for each customer. | 92 | 4.34 | .700 |
| Payment terms are strictly negotiated before an order is taken. | 92 | 4.14 | .779 |
| Negotiating extended payment terms with suppliers can be a valuable strategy to improve a manufacturing company's cash flow. | 92 | 4.53 | .619 |
| Taking advantage of early payment discounts offered by suppliers can be beneficial for both cash flow and cost savings. | 92 | 4.42 | .917 |
| Implementing efficient accounts payable processes can minimize errors and optimize payment timing for manufacturing companies. | 92 | 4.22 | .608 |
| Automating accounts payable tasks can streamline the process and improve working capital efficiency. | 92 | 4.08 | 1.071 |
| Manufacturing companies should maintain high inventory levels to avoid stock outs and production disruptions. | 92 | 4.58 | .952 |
| Implementing just-in-time (JIT) inventory management can significantly improve cash flow for manufacturing companies. | 92 | 3.66 | .986 |
| Utilizing effective forecasting techniques can help manufacturing companies reduce excess inventory. | 92 | 4.49 | .671 |
| Average | 92 | 4.31 | 0.78 |

Table 2 presents the results of respondents agreed that having a credit control policy with credit checks for all customers prior to offering credit with a mean of 4.60 and the standard deviation of 0.493. They also agreed that setting credit limits for each customer is a necessary practice with a mean of 4.34 and the standard deviation of 0.700. Most of the respondents agreed that negotiating payment terms before an order is taken is important with a mean of 4.14 and a standard deviation of 0.779. Also, the respondents agreed that the negotiating extended payment terms with suppliers can be a valuable strategy to improve cash flow with a mean of 4.53 and standard deviation of 0.619. The respondents agreed that taking advantage of early payment discounts offered by suppliers can be beneficial for both cash flow and cost savings with a mean of 4.42 and standard deviation of 0.917. They also agreed that implementing efficient accounts payable processes is important for minimizing errors and optimizing payment timing with a mean of 4.22, and the standard deviation of 0.608. The participants strongly agreed towards agreement that automating accounts payable tasks can improve working capital efficiency with mean of 4.08 and standard deviation of 1.071. Also, the respondents agreed that

maintaining high inventory levels is important to avoid stakeouts and production disruptions with mean of 4.58 and standard deviation of 0.952. On the other hand, respondents leaned towards agreement that implementing JIT inventory management can improve cash flow significantly with mean of 3.66 and standard deviation of 0.986. The respondents strongly agreed that utilizing effective forecasting techniques is important for reducing excess inventory with mean of 4.49 and standard deviation of 0.671.

Descriptive Statistics on Capital Budgeting Technique

The study sought to determine the descriptive statistics of capital budgeting technique. The results are presented in Table 3 below.

Table 3: Capital Budgeting Technique and Profitability

| STATEMENT | N | Mean | SD |
|---|-----------|-------------|-------------|
| Capital budgeting techniques help manufacturing companies make better investment decisions. | 92 | 4.70 | .463 |
| The payback period enhances decision-making transparency and accountability by focusing on tangible cash flow metrics. | 92 | 4.84 | .427 |
| The payback period is the most reliable method for evaluating capital projects in manufacturing. | 92 | 4.52 | .602 |
| The net present value (NPV) method considers the time value of money, leading to more informed decisions. | 92 | 4.33 | .743 |
| Manufacturing companies should prioritize projects with the shortest payback period. | 92 | 4.29 | .967 |
| Implementing capital budgeting techniques requires significant time and resources, making them impractical for small manufacturers. | 92 | 3.72 | 1.485 |
| Utilizing capital budgeting methods allows for a more accurate assessment of project risks. | 92 | 4.64 | 1.054 |
| A well-defined capital budgeting process improves communication and alignment between departments in a manufacturing company. | 92 | 3.92 | 1.102 |
| The accuracy of capital budgeting techniques is highly dependent on the quality of financial forecasts. | 92 | 4.30 | .691 |
| Manufacturing companies should rely solely on historical data when making capital budgeting decisions. | 92 | 4.54 | .844 |
| Average | 92 | 4.6 | 0.84 |

Table 3 presents the respondents strongly agreed that the capital budgeting techniques help manufacturing companies make better investment decisions with a mean of 4.70 and the

standard deviation of 0.463. They also agreed the payback period enhances decision-making transparency and accountability by focusing on tangible cash flow metrics with a mean of 4.84 and the standard deviation of 0.427. Most of the respondents agreed that the payback period is the most reliable method for evaluating capital projects in manufacturing with a mean of 4.52 and a standard deviation of 0.602. Also, the respondents agreed that the net present value (NPV) method considers the time value of money, leading to more informed decisions with a mean of 4.33 and standard deviation of 0.743. The respondents agreed that manufacturing companies should prioritize projects with the shortest payback period with a mean of 4.29 and standard deviation of 0.967. They also agreed that implementing capital budgeting techniques requires significant time and resources, making them impractical for small manufacturers with a mean of 3.72 and the standard deviation of 1.485. The participants strongly agreed Utilizing capital budgeting methods allows for a more accurate assessment of project risks with mean of 4.64 and standard deviation of 1.054. Also, the respondents agreed that a well-defined capital budgeting process improves communication and alignment between departments in a manufacturing company with mean of 3.92 and standard deviation of 1.102. On the other hand, respondents leaned the accuracy of capital budgeting techniques is highly dependent on the quality of financial forecasts with a mean of 4.30 and the standard deviation of 0.691. The respondents strongly agreed that u Manufacturing companies should rely solely on historical data when making capital budgeting decisions with mean of 4.54 and standard deviation of 0.844.

Descriptive Statistics on Capital Structure Management

The study sought to determine the descriptive statistics of capital budgeting technique. The results are presented in Table 4.

Table 4: Capital Structure Management and Profitability

| STATEMENT | N | Mean | SD |
|---|----------|-------------|-----------|
| The primary goal of a manufacturing company's capital structure should be to maximize debt financing. | 92 | 4.09 | .794 |
| Easy access to debt financing is a strong indicator of a healthy manufacturing company. | 92 | 4.60 | .680 |
| Manufacturing companies should prioritize using debt financing over equity financing. | 92 | 4.55 | .803 |
| Maintaining a high debt-to-equity ratio is a good strategy for long-term growth in manufacturing. | 92 | 4.36 | .806 |

| | | | |
|--|-----------|-------------|--------------|
| Lenders are more likely to provide debt financing to manufacturing companies. | 92 | 3.50 | 1.418 |
| Manufacturing companies should issue new equity only as a last resort for raising capital. | 92 | 4.59 | .666 |
| A large number of outstanding shares can dilute ownership and voting rights, making equity financing unattractive for manufacturing companies. | 92 | 3.54 | 1.270 |
| Compared to debt, equity financing provides a more stable and flexible capital structure for manufacturing companies. | 92 | 4.28 | .635 |
| Issuing new equity allows manufacturing companies to signal confidence in their future prospects to investors. | 92 | 3.79 | .846 |
| Retaining a significant portion of profits allows manufacturing companies to fund future growth through internal equity financing. | 92 | 4.82 | .390 |
| Average | 92 | 4.30 | 0.831 |

Table 4...

The table 4 shows as the respondents strongly agreed that the primary goal of a manufacturing company's capital structure should be to maximize debt financing with a mean of 4.09 and the standard deviation of 0.794. They also agreed that the easy access to debt financing is a strong indicator of a healthy manufacturing company with a mean of 4.60 and the standard deviation of 0.680. Most of the respondents strongly agreed that manufacturing companies should prioritize using debt financing over equity financing with a mean of 4.55 and a standard deviation of 0.803. Also, the respondents agreed maintaining a high debt-to-equity ratio is a good strategy for long-term growth in manufacturing with a mean of 4.36 and standard deviation of 0.806. The respondents agreed that Lenders are more likely to provide debt financing to manufacturing companies with a mean of 3.50 and standard deviation of 1.418. They also strongly agreed that manufacturing companies should issue new equity only as a last resort for raising capital with a mean of 4.59 and the standard deviation of 0.666. The participants agreed a large number of outstanding shares can dilute ownership and voting rights, making equity financing unattractive for manufacturing companies with mean of 3.54 and standard deviation of 1.270. Also, the respondents agreed that compared to debt, equity financing provides a more stable and flexible capital structure for manufacturing companies with mean of 4.28 and standard deviation of 0.635. On the other hand, respondents accepted that the issuing new equity allows manufacturing companies to signal confidence in their future prospects to investors with a mean of 3.79 and the standard deviation of 0.846. The respondents strongly agreed that retaining a significant portion of profits allows manufacturing companies to fund future growth through internal equity financing with mean of 4.82 and standard deviation of 0.390.

Descriptive Statistics on Profitability of Manufacturing Companies

The study sought to establish the descriptive measures profitability of manufacturing companies in Koodbuur District in Hargeisa Somaliland. The results are illustrated in table 5.

Table 5: Descriptive Statistics on Profitability

| | N | Mean | Std. Deviation |
|---------------|----|------|----------------|
| Profitability | 92 | 2.17 | .409 |

Table 5 presents descriptive statistics on the profitability of 92 manufacturing companies. The mean profitability is 2.17, indicating that, on average, these companies have a profitability score of 2.17. The standard deviation is 0.409, showing a relatively low level of variability in profitability among the companies. This suggests that most companies' profitability scores are clustered closely around the mean, indicating consistent profitability levels across the sample. The sample size of 92 companies provides a reasonable basis for these statistics, reflecting the financial performance of the manufacturing sector within the study.

Goodness of Fit Test Results

Table 6: Omnibus Tests of Model Coefficients

| | | Chi-square | df | Sig. |
|--------|-------|------------|----|------|
| Step 1 | Step | 12.049 | 3 | .007 |
| | Block | 12.049 | 3 | .007 |
| | Model | 12.049 | 3 | .007 |

The Omnibus Tests of Model Coefficients as shown in the table 6 assess the overall significance of the logistic regression model across different stages. At Step 1, the chi-square value of 12.049 with 3 degrees of freedom yields a significant p-value of .007. This suggests that the model, as well as its individual steps and blocks, collectively contribute significantly to explaining the variance in the profitability. The identical chi-square values across "Step", "Block", and "Model" indicate consistency in model significance testing throughout the model-building process. Therefore, we can infer that the overall model, including its predictors, is statistically significant in predicting the profitability.

Table 7: Hosmer and Lemeshow Test

| Step | Chi-square | df | Sig. |
|------|------------|----|-------|
| 1 | 10.160 | 8 | 0.254 |

The Hosmer and Lemeshow Test, as indicated by a chi-square value of 10.160 with 8 degrees of freedom and a significance level of 0.254, suggests that the logistic regression model fits the data adequately. The non-significant p-value (0.254) indicates that there is no substantial difference between the observed and expected values across different groups or strata. Thus, based on this result, there is no evidence to reject the null hypothesis, implying that the model provides a good fit to the data.

Binary Logistic Regression Analysis

Binary logistic analysis of financial management practices and profitability was undertaken. Binary logistic regression is a statistical method that models the relationship between a binary dependent variable and one or more independent variables. It uses the logit function to associate the likelihood of an event occurring (e.g., success/failure) with a linear combination of predictor factors. The method uses maximum likelihood estimation to calculate the probability of the outcome occurring for each unit change in the predictors. The coefficients are important outputs because they are interpreted in terms of log-odds or translated to odds ratios for ease of understanding. Logistic regression is commonly used in domains such as medical, social sciences, and marketing to predict outcomes based on input information. For further information, see "Applied Logistic Regression" by Hosmer, Lemeshow, and Sturdivant (2013).

Baseline Model

A baseline model in binary logistic regression is a simple model that serves as a point of comparison for more complicated models. It normally simply contains the intercept term, which represents the log-odds of the outcome occurring when no predictors are present. This model implies that the likelihood of the outcome remains constant throughout all the data, giving a simple standard against which to compare the performance of more complicated models. The baseline model's projected probability is the fraction of the outcome that occurs in the sample. Researchers can assess the utility of integrating more predictors by comparing their performance metrics, like accuracy or AUC, to this baseline. For a detailed examination of baseline models and their applications, by Hosmer, Lemeshow, and Sturdivant (2013). The results are presented in table 8.

Table 8: Baseline Model Equation

| | | B | S.E. | Wald | df | Sig. | Exp(B) |
|--------|----------|--------|------|--------|----|------|--------|
| Step 0 | Constant | -2.497 | .393 | 40.316 | 1 | .000 | .082 |

Table 8 presents the coefficients and statistical significance of the baseline model equation. In this model, the constant term has a coefficient of -2.497 with a standard error (S.E.) of 0.393. The Wald statistic, which assesses the significance of the coefficient, is 40.316 with 1 degree of freedom (df), resulting in a p-value of .000, indicating a highly significant relationship. The exponential of the coefficient (Exp(B)), which represents the odds ratio, is 0.082. This suggests that for every one-unit increase in the predictor variable, the odds of the profitability decrease by a factor of 0.082, holding all other variables constant.

Table 9: Score Test

| | | | Score | df | Sig. |
|--------------------|-----------|------------------------------|--------|----|------|
| Step 0 | Variables | Working Capital Management | 1.051 | 1 | .305 |
| | | Capital Budgeting Technique | 11.850 | 1 | .001 |
| | | Capital Structure Management | 2.515 | 1 | .113 |
| Overall Statistics | | | 13.055 | 3 | .005 |

Table 9 shows the findings of a statistical analysis, most likely a regression model that investigated the relationship between several financial management variables and a specific profitability. The "Variables" section provides the independent variables used in the study, along with their scores, degrees of freedom (df), and significant levels (Sig). The total statistics show that the model is statistically significant ($p = .005$), implying that at least one of the included variables has a significant effect on the result. Notably, "Capital Budgeting Technique" has a high score and a low significance level ($p = .001$), indicating a strong relationship with the profitability. However, "working capital management" and "capital structure management" have lower scores and non-significant p-values, indicating weaker correlations.

Logistic Regression Outcome

Table 10: Full Model of Binary Logistic Regression

| | | B | S.E. | Wald | df | Sig. | Exp(B) |
|---------------------|------------------------------|--------|-------|-------|----|------|--------------|
| Step 1 ^a | Working capital management | -.056 | .098 | .329 | 1 | .566 | .946 |
| | Capital budgeting technique | -.486 | .189 | 6.626 | 1 | .010 | .615 |
| | Capital structure management | .057 | .115 | .247 | 1 | .619 | 1.059 |
| | Constant | 17.986 | 7.560 | 5.660 | 1 | .017 | 64769365.924 |

Test of Hypotheses

H_{01} : Working capital management has no significant effect on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.

The first objective sought to determine the effect of working capital management on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland. The results shown in Table 10 indicate that working capital management as the first objective (Exp(B) = .946, $p=0.566$) is not statistically significant since the p-value is higher than the significance level of 0.05. Therefore, the null hypothesis that working capital management has no significant effect on the profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland, was not rejected at the 5% level of significance. This implies that the working capital management coefficient is not different from zero since the p value is greater than 0.05. The odds ratio for working capital management indicates that every unit increase in working capital management is associated with a 5.4% decrease in the odds of profitability of manufacturing companies in Koodbuur District, as per the sample. This finding disagrees with Kiyamaz (2023) who investigated the impact of working capital management on the profitability of firms in Pakistan that found the working capital management has significant impact on firm's profitability in the food sector in Pakistan.

H_{02} : Capital budgeting technique has no significant effect on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.

The second objective sought to investigate the effect of capital budgeting technique on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland. The results shown in Table 10 indicate that working capital management as the second objective (Exp(B) = 0.615, $p = 0.010$) is statistically significant since the P-value is less than 0.05 level of significance. Therefore, the null hypothesis that the capital budgeting technique has no significant effect on the profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland, was rejected at a 5% level of significance. This implies that the capital budgeting technique coefficient is different from zero since the p value is less than 0.05. The odds ratio for the capital budgeting technique indicates that every unit increase in the capital budgeting technique is associated with a 38.5% decrease in the odds of profitability for manufacturing companies in Koodbuur District, as per the sample. This finding agrees with those Nyarombe, Kirui, Isaac, and Gwaro (2015), who investigated the impact of capital budgeting techniques on the profitability of listed companies in Eldoret town, Kenya.

H_{03} : Capital structure management has no significant effect on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland.

The third objective sought to examine the effect of capital structure management on profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland. The results shown in Table 10 indicate that capital structure management as the third objective ($\text{Exp}(B) = 1.059$, $p = 0.619$) is not statistically significant since the p-value is greater than the significance level of 0.05. Therefore, the null hypothesis that capital structure management has no significant effect on the profitability of manufacturing companies in Koodbuur District in Hargeisa, Somaliland, was not rejected at the 5% level of significance. This implies that the capital structure management coefficient is not different from zero since the p value is greater than 0.05. The odds ratio for capital structure management indicates that every unit increase in capital structure management is associated with an increase in the odds of profitability for manufacturing companies in Koodbuur District, as per the sample. This finding disagrees with those Amoia and Dhliwayo (2022) who explored the impact of capital structure on the profitability of nascent small and medium enterprises in Ghana that found the capital structure has significant impact on profitability of nascent small and medium enterprises in Ghana.

CONCLUSIONS AND RECOMMENDATIONS

Based on the significant findings of the study, it is evident that capital budgeting technique plays a crucial role in determining the profitability of manufacturing companies in Koodbuur District, Hargeisa, and Somaliland. Therefore, an advanced recommendation would be for companies to prioritize the refinement and enhancement of their capital budgeting technique. This can involve implementing more sophisticated evaluation methods, such as net present value, analysis of payback period and profitability index, to better assess the profitability and risk associated with investment projects. Additionally, investing in training programs to ensure that financial managers possess the necessary skills to effectively utilize these techniques would be beneficial. By improving their capital budgeting practices, companies can make more informed investment decisions, leading to enhanced profitability and long-term growth. Furthermore, since working capital management and capital structure management did not show statistically significant effects on profitability, it would be prudent for companies to focus their resources and efforts primarily on optimizing their capital budgeting practices to drive profitability improvements. This targeted approach allows for more efficient allocation of resources and ensures that companies are addressing the most factors affecting their profitability. The capital budgeting technique has a statistically significant effect on profitability of

manufacturing companies in Koodbuur District in Hargeisa Somaliland. This finding agrees with those Nyarombe, Kirui, Isaac, and Gwaro (2015), who investigated the impact of capital budgeting techniques on the profitability of listed companies in Eldoret town, Kenya.

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