



INFLUENCE OF FINANCIAL CONTROL ON PROFITABILITY OF SUGAR MANUFACTURING FIRMS IN WESTERN KENYA

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ABSTRACT

The general objective of the study was to investigate the influence of financial control on profitability of sugar manufacturing firms in Western Kenya. The specific objectives were to determine the influence of asset control, accounting control system, audit control and budgetary control on profitability of sugar manufacturing firms in Western Kenya. The study targeted 94 respondents from finance, risk, procurement and accounts department of Nzoia Sugar Company, Kibos Sugar, Sukari industries, Sony Sugar, Butali Sugar Company and West Kenya Sugar Company. Census sampling techniques was used to select 94 respondents as they were less than 100. Structured questionnaires were used to collect primary and Descriptive statistics and inferential statistics were used during data analysis with aid of SPSS version 21. The results were presented in tables and models. The results revealed that financial controls have significant influence on the profitability of sugar manufacturing firms in Western Kenya. Using unstandardized B coefficients in Multiple linear regression, the findings revealed that unit change in asset control would result to significant change in profitability by 0.177 units in the same direction; a unit change in accounting control system would result to change in profitability by 0.205 units in the same direction; a unit change in audit control would result to significant change in profitability by 0.336 units and a unit change in budgetary control would result to significant change in profitability by 0.153 units in the same direction. The study therefore concluded that asset control, accounting control system; audit control and budgetary control have positive significant influence on profitability of sugar manufacturing firms in Western Kenya. The study recommended that the management should also have a proper mix of asset portfolio so as to appropriately match with the financial needs of the sugar industry. Sugar manufacturing firms should also undertake periodic forensic audits to detect financial malpractices.

Key Words: Asset Control, Accounting Control System, Audit Control, Budgetary Control, Sugar Manufacturing Firms

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INTRODUCTION

Organizations have established various systems of controls for efficient and effective running of their businesses to achieve their goals (Charles, Schmidheiny & Watts, 2017). Financial control is becoming indispensable in both private and public sectors in modern world because of evolving complex methods of doing business involving technology, and increased size of business units. Financial control forms a very vital part of any financial system. They require that resources of any organization are used effectively and properly in order to have accurate reports of activities (Laudon & Laudon, 2016). However, poor or ineffective financial control put resources at risk where there are inefficiencies or theft, abuse or fraud. It is therefore the responsibility of the management to ensure proper and effective financial controls are in existence. The responsibility also lays on management to ensure that these controls are effectively operated (Prempeh, Twumasi & Kyeremeh, 2015).

Financial controls are the process in which managers assume that resources are obtained and used effectively and efficiently, in the accomplishment of the organization's objectives. Financial control systems include variables that are under the control of management (Kinuthia, 2012). Many organizations consider budgetary control as the base for financial control gives a wide management platform and lead to effective resource allocation. It contributes in management of assets and better allocation of resources which generates more income. The main objectives of budgetary control include combining ideas from the various levels of management in the budget control process, coordinating various activities in the firm, revealing areas of weakness and planning and controlling a firm's income and expenditure to achieve organizational goals. In many profitable companies, budget is actually a key to their success (Horngren et. al., 2012).

There have been a number of studies that have documented the importance of financial control and the general inadequacy of financial controls in organizations in United States of America. The collapse of Enron in United States of America has been as a consequence of breakdown of financial control (Balakrishnan, Danninger, Elekdag & Tytell, 2011). The company's collapse resulted from the disclosure that it had reported false profits; using accounting methods that failed to follow generally accepted accounting principles (GAAP). The American International Group's (AIG) auditors, PricewaterhouseCoopers, concluded that the company's financial controls over financial reporting were deficient. AIG Inc had been under investigation over alleged suspicious transactions that regulators said were used by the insurer to massage its finances (Mulford & Comiskey, 2011).

Africa countries have also suffered from the wrath of financial control which has affected performance of public and private organizations. In African economies, listed companies have also witnessed several cases of collapses, some of which include the Intercontinental Bank Plc, Oceanic Bank Plc, Platinum Habib Bank Plc, Anglo-African textile industry, Steel rolling Nigeria limited, Nigeria wire and cable (all in Nigeria). In Nigeria, financial controls aspect that is been advocated by the investors and academic scholar is the audit controls and budgetary controls (Omar & Simon, 2011).

Kenya, like any other developing nations has also suffered from lack of financial controls or inadequacies in financial controls resulting to collapse of both public and private organizations. Kinuthia (2012) used governance control, income control, asset control and purchase control to determine financial efficiency in public schools in Muranga County. On the other hand, Chelaga and Akama (2016) indicated that technical skills, Auditing skills, Bookkeeping of the CBO officials and internal control systems and budgeting were positively correlated

with financial control practices of CBOs in Migori County. Doe (2008) asserted that financial control is a key component of the overall internal control system and can be defined as a set of ex ante verifications undertaken during budget execution to ensure that public resources are committed and expended in accordance with the budget law, existing financial laws and regulations and government priorities

Companies must earn a good return from their investments that will enable the board of directors make a good dividend payout. Profitability refers to a company's ability to generate an adequate return on invested capital (Wild, Larson & Chiapetta, 2007). Therefore, companies are interested in the ability to use their assets efficiently to produce profits (and positive cash flows). A return is judged by assessing earnings relative to the level and sources of financing. Profitability is also relevant to solvency. The key measures of profitability are return on capital employed, return on assets and return on investment. The most important goal in operating a company is to earn an income for its owners. A business that is not profitable cannot survive. Conversely, a business that is highly profitable has the ability to reward its owners with a large return on their investment. Increasingly, profitability is one of the most important tasks of the business managers. Managers constantly look for ways to change the business to improve profitability (Kung'u, 2015).

Few studies have been carried out to indicate the relationship between financial control and profitability of an organization. However, there is no consensus on the influence of financial control on the profitability. In Germany, Chirinko and Elston (2006) found a significant positive relation between financial control and profitability. The favorable financial control outcomes associated with the GBIM implies a favorable shift in the long-run cost curve and an increase in profitability provided the firms operate in noncompetitive markets. Rathirane (2014) proved that there is positive relationship between financial

control and organizational performance and there is positive control and relationship between budgetary control and organizational performance in Jaffna City. In Uganda, Musoke and Nyonyintono (2017) revealed that financial controls are significant influential factors of profitability performance of SACCOs in Wakiso district. However, the study utilized only budgetary controls as one of the financial controls.

In Kenya, sugarcane Cane growing on large scale started in Miwani and Kibos in Kisumu district between 1902 and 1940. As a result of this commercialization, Miwani Sugar Company was founded in 1922. After independence, the Government commenced large scale sugar projects in Nyanza and western provinces in an effort to meet the ever growing local sugar demand. Five more factories were also established as follows, Muhoroni in 1966, Chemelil in 1968, Mumias in 1973, Nzoia in 1978, and South Nyanza in 1979. The latest entrants are West Kenya, Butali Sugar, Kibos, Soin, Transmara, Kwale and Sukari Sugar Industries.

Statement of the Problem

The sugar industry in Kenya is characterized by frequent company shut downs, huge debt; unwise investment practices, liquidity shortages, low production capacity and high production cost making it difficult to them to compete favorably with cheap imports from COMESA trading block (KSB, 2017). Transparency international (2015) indicated that sugar industry in Kenya faces collapse if the current scenario are not resolved. Government approved sale of five Sugarcane manufacturing companies in 2015 whose performance were dismal and they were unsustainable (GoK, 2016).

The core problem affecting Kenya's sugar industry is the protracted persistent deterioration in profitability due to inadequate prudent financial practices (Fwamba, 2018). Approximately 50% of sugar companies in Kenya each year experience a declining profitability hence going under receivership while

some are faced with imminent collapse due to huge debt burden and the inability to sustain their operations since they are not able to break-even. KSB Annual report, (2018) indicated that approximately 50% of sugar companies in Kenya each year experience a declining profitability. State-owned millers have recorded mixed results in their profitability with Nzoia Sugar, Sony Sugar and Chemelil Sugar registering decrease in profitability. For example, Nzoia Sugar profits reduced from KES 1.2 billion in 2015 to KES 0.5 billion in 2016 (OAG, 2017). In Sony Sugar, the gross profit decreased from 750 million in 2014 to 225 million in 2015 (OAG, 2016). On the other hand, Mumias Sugar, Chemelil Sugar and Muhoroni Sugar have recorded losses. For example, Chemelil Sugar losses increased from 52,388,455 in 2015 to 258,434,617 in 2016. Mumias Sugar Company suffered a net loss after tax of Kshs 6.8 billion in 2017 against the previous year's loss of Kshs 4.8 billion. The private millers in the industry also recorded reduction in profitability over the years due to high cost of production and cheap imports (Mwanzo, 2017). This implies that the profitability of sugar industry in Kenya has been declining over the years. Despite the existence of financial control system in sugar firms, the performance of the sugar sub-sector in general and that of the sugar factories in particular has been a source of concern to the national economy. These systems are put in place to ensure that financial related assets or properties of an organization are safeguarded, either from externals or employees of an organization from any threat whatsoever, whether by theft, loss or misappropriation. However, various performance indicators including profitability have indicated that the industry is not competitive and attractive. Collapse in Sugar industry in Kenya would have a profound effect as 15% of the population depends on the industry either directly or indirectly (Machoka, 2014). Further, sugar industry has been a source of revenue to government through various taxes. There is no doubt that adequate measures need to be put in

place to improve on the profitability of sugar manufacturing firms in Kenya. Despite the importance of financial control on profitability of sugar industry, it has received little attention for scholarly and practical implications. Studies focusing on financial controls have not targeted sugar industry. Chelagat and Akama (2016) examined financial control practices in community based organizations. Chebet, Nyangua and Nyabonga (2018) assess the effect of financial control on Profitability of SACCOs in Kericho County. On the other hand, studies on sugar industry have concentrated on internal control system. Mwakimasinde, Odhiambo and Byaruhanga (2014) analyzed the effect of internal control systems on the profitability of sugarcane out grower companies in Kenya. Ngetich (2017) examined effect of internal control on profitability of firms listed at NSE which Mumias Sugar Company is one of them. These studies did not cover all areas of financial control therefore; the current study sought to investigate influence of financial controls on profitability of sugar industry in Western Kenya.

Study Objectives

The general objective of the study was to investigate the influence of financial controls on profitability of sugar manufacturing firms in Western Kenya. The specific Objectives were:-

- To establish the influence of asset control on profitability of sugar manufacturing firms in Western Kenya.
- To establish the influence of accounting control system on profitability of sugar manufacturing firms in Western Kenya.
- To establish the influence of audit control on profitability of sugar manufacturing firms in Western Kenya.
- To determine the influence of budgetary control on profitability of sugar manufacturing firms in Western Kenya.

Study Hypotheses

- **H₀₁:** Asset control had no significant influence on profitability of sugar manufacturing firms in Western Kenya.
- **H₀₂:** Accounting control System had no significant influence on profitability of sugar manufacturing firms in Western Kenya.
- **H₀₃:** Audit Control had no significant influence on profitability of sugar manufacturing firms in Western Kenya.
- **H₀₄:** Budgetary control had no significant influence on profitability of sugar manufacturing firms in Western Kenya.

LITERATURE REVIEW

Theoretical Review

The Contingency Theory

The contingency theory was crafted by Pike (1986) who asserted that resource-allocation efficiency is not merely a matter of adopting sophisticated, theoretically superior investment techniques and procedures but consideration must also be given to the fit between the corporate context and the design and operation of the capital budgeting system. Pike (1986) focused on three aspects of the corporate context which are assumed to be associated with the design and operation of a firm's capital budgeting system. The first aspect is a firm's organizational characteristics. Decentralization and a more administratively oriented control strategy involving a higher degree of standardization are characteristics of large companies. Smaller, less complex organizations tend to adopt interpersonal, less sophisticated control systems. But on Schall and Sundem (1980) study which showed that the use of sophisticated capital budgeting techniques declines with an increase in environmental uncertainty.

The second aspect is environmental uncertainty. The more variable and unpredictable the context of operation is, the less appropriate will be the highly bureaucratic, mechanistic capital budgeting

structures. Pike (1986) suggests that firms operating in highly uncertain environments are assumed to benefit from sophisticated investment methods, particularly in appraising risk.

The last aspect concerns behavior characteristics. Pike (1986) identifies three characteristics, that is; management style, degree of professionalism and the history of the organization. An administratively-oriented capital budgeting control strategy is assumed to be consistent with analytical style of management, a high degree of professionalism and a history of undistinguished investment outcomes. The firm's financial status may thus influence the design and effort put on capital budgeting.

The Agency Cost Theory

The agency cost theory arose from the seminal contributions of Jensen and Meckling (1976). Agency cost theory assumes that firm's financing structure can be used as a mechanism or vehicle by managers and investors solve the free cash flow problem. Agency cost theory further asserts that business form of organizations is illustrated by professional managers who have little ownership but are running business on behalf of shareholders (owners) who are extensively dispersed characterizes an archetypal principal-agent problem (Gedajlovic & Shapiro, 2002). Thus, agency costs arise from separation of ownership and control, whereby managers maximize their own benefits or employ the firm's resources for personal gains instead of maximizing value of firm or the shareholder's wealth (Mian, Haris & Muhammad, 2012).

White Collar Crime Theory

Dorminey, Fleming, Kranacher and Riley (2012) reported that the 1940 work of Edwin H. Sutherland is credited with the term "white-collar crime" that formed the foundation of 'white collar crime' theory which is now famous in finance mismanagement researches because the theory asserts that those who engage in white collar crime use their soft skills to

access internal financial systems of a firm with or without the consent of internal workers. That is, while earlier criminologists and sociologists examined the broad topic of crime, focusing mainly on street and violent crime, Sutherland was the first to integrate crimes of the upper white-collar class with economics and business activity. White-collar offenses are viewed as equally serious as street crimes only that white collar criminals use soft skills to embezzle finances from firms. Thus, white-collar criminals are not like typical bank robbers/street criminals, who are often described as "young and dumb." Finance robbers and other strong-arm artists often make comic mistakes like writing the holdup note on the back of a probation identification card, leaving the getaway car keys on the convenience store counter, using a zucchini as a holdup weapon, and timing the holdup to get stuck in rush hour traffic. Then there is the classic about the robber who ran into his own mother at the bank (Robertson, & Timothy, 1999).

Empirical Review

Asset Control and Profitability

Iqbal and Mati (2012) examined the relationship between fixed Assets and Firm's Profitability the scope of research is related to the firm's profitability and the relationship with the noncurrent assets as managing working capital and capital expenditure efficiently affects the profitability of the firm. Last ten years data of non – financial firms listed at KSE 100 index was taken. It includes Cement, Manufacturing, Engineering, Chemical, Paper, Sugar, Textile, Transport, Tobacco, Vanaspati and Jute etc. For this purpose multiple regression analysis has been utilized to find out the effects of fixed assets (I.V.) on profitability (D.V). It is concluded that there is an association between fixed Asset and firms Profitability indicating hypothesis is accepted.

Lydia (2018) assessed the effect of assets management on profitability of deposit taking

SACCOs in Nakuru County. The study used explanatory research design, stratified proportional sampling and random sampling technique. The study used both primary and secondary data. Primary data was collected using structured questionnaires. The target population was branch and operations managers from each of the Saccos in Nakuru and management staff from various departments of the Deposit Taking SACCOs from the main office. Data was analyzed using descriptive statistics and inferential statistics methods with the assistance of SPSS as the tool of analysis. A significant moderate positive correlation exists between fixed assets management and profitability of deposits taking Saccos in Nakuru County.

Muhammad (2015) examined the efficiency of fixed assets management practices of the selected firms in sugar sector, cement sector and textile sector. The study uses data of listed corporation in the Karachi Stock Exchange, as the sample. The study is based on sample of three sectors (sugar, cement, and textile) over five year period from 2010 to 2014. 15 companies were selected from KSE 100 index and primary data is used for research. There was positive correlation between EPS and fixed asset quality of Textile, cement, and sugar sector when it was analyzed independently while it gave a positive relationship when analyzed together with other performance indicators. Effective use of resources plays important role increasing firm profitability.

Accounting Control System and Profitability

Nunow (2016) sought to find out the effect of accounting control system on small and medium-enterprises profitability in Nairobi. The total population of this study comprised of all registered small and medium sized enterprises in Nairobi with the Federation of Small and micro enterprises estimated at one thousand six hundred from which using a stratified random sampling a sample size of one hundred and sixty. Data was collected using structured questionnaire with the assistance of

trained research assistants. The study revealed uncertainty on business sometimes being unable to pay its suppliers on time and if it receives cash discounts from its suppliers upon payment within a stipulated period. From the regression analysis, the results revealed that accounting control system had a positive relationship with profitability.

Ademola (2014) examined the effect of accounting control system on the profitability of food and Beverages manufacturing firms in Nigeria. The ex-post factor research design was used because it involves events that have already taken place in the past. The records observed were from 2000-2011, a period of twelve years. Multiple regression analytical tool was used to test the hypotheses. Data were sourced from Annual Reports of the companies under study. The results show that accounting control system had a negative significant effect with the profitability ratio.

Audit Control and Profitability

Internal and External are two types of audit. The objectives of an audit are effectiveness and efficiency of operations. Reliability and integrity of financial and operational information. Safeguarding of assets. Compliance with laws, regulations, and contracts. Auditing helps us to detect error and fraud at an early stage and also helps management to improve with better strategies to quality management system (Arshad, Satar, Hussain & Naseem, 2011).

Mugo (2013) investigated and sought to establish the relationship between internal Audit control systems and profitability in Technical Training Institutions in Kenya. The research was conducted using both quantitative and qualitative approaches using Survey, Correlation and Case study as Research Designs. Data was collected using Questionnaires as well as review of available documents and records targeting

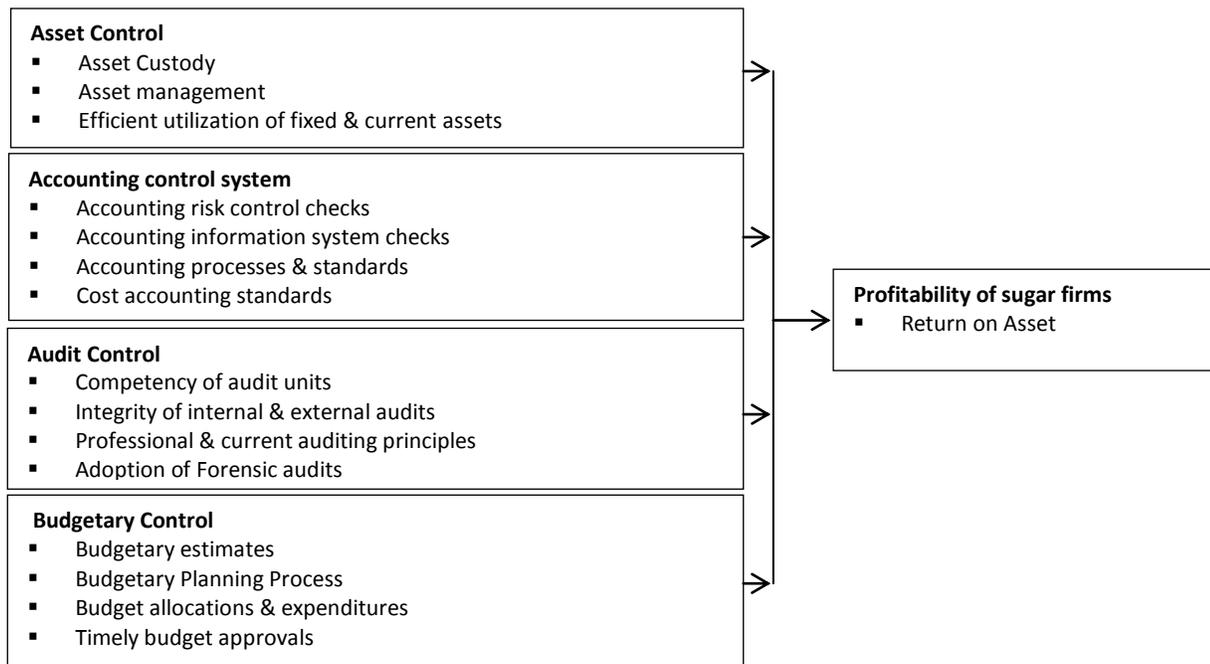
basically. The study established a significant relationship between audit control system and profitability.

Budgetary Control and Profitability

Chircir and Simiyu (2017) examined the influence of budgetary control processes on profitability of Almasi Beverages Group Ltd, Kenya. The study utilized concurrent triangulation research design. The respondents for the study were departmental heads and supervisors numbering 126. The HODs were selected through purposive sampling methods while the supervisors were selected through stratified random sampling method. Questionnaires and interview guide were used to collect primary data. Secondary information was obtained from document analysis of the groups' financial statements. MLR statistics showed that change in profitability of ABGL was influenced by the four factors studied under budgetary control (human factors, monitoring and evaluation).

Nafisatu (2018) sought to evaluate the effect of budgetary control system on the performance of the East African Portland Cement Company Limited. Descriptive research design was used to describe the independent variable whereas explanatory research design was used to describe the relationship between the independent and dependent variables in the study. Questionnaires were used to collect primary data whereas secondary data was obtained from the published accounts of East African Portland Cement Company for the period 2012-2016. A total of 45 staff was sampled using the purposive sampling technique, and data obtained was subjected to regression analysis. The study concluded that there was a high positive correlation of 54.4% between budgetary control and firm's profitability measured in terms of profit before.

Conceptual Framework



Independent Variable

Dependent Variable

Figure 1: Conceptual Framework

Source: Author (2019)

METHODOLOGY

This study adopted explanatory and descriptive survey research design. Explanatory studies are studies that are aimed at establishing causal relationship between variables. The study targeted 94 employees from the department of Finance and accounting, internal audit, procurement as well as risk and compliance in Butali Sugar, West Kenya Sugar, Kibos Sugar and Allied Industries Limited, Sukari Industries Limited, Nzoia Sugar Factory and South Nyanza Sugar Company. Data was collected by use of questionnaires and it was applied to the 85 sampled respondents. Descriptive statistics and inferential statistics were used to analyze the data. The multiple regression equation in this study is as follow:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Where:-

Y = Profitability

β_0 = Constant, showing profitability in the absence of the financial controls

β_1 - β_4 = Regression Coefficients of financial controls influencing profitability

X_1 = Asset Control

X_2 = Accounting Control system

X_3 = Audit Control

X_4 = Budgetary Control

ϵ = Error Term

FINDINGS AND DISCUSSIONS

Descriptive Statistics

The presentation of descriptive statistics is based on the frequencies, percentage, mean and standard deviation of study variables. These variables were asset control, accounting control system, audit control and budgetary control which were independent variables while profitability was dependent variable. The respondents were asked to indicate their level of agreement from 1 strongly

disagree, 2-Disagree, 3-undecided, 4-agree and 5 strongly agree. The findings are as follows.

Asset control

Asset control variable was used in the first objective which sought to establish the influence of asset control on profitability of sugar manufacturing firms

in Western Kenya. The results were presented in Table 1 in which percentage were presented outside brackets while frequency in the brackets. The agreement ranged from 1 strongly disagree, 2-Disagree, 3-undecided, 4-agree and 5 strongly agree. SDV is the standard deviation.

Table 1: Asset Control

Statement	1	2	3	4	5	Mean	SDV
The fixed asset and current asset portfolio is appropriately matched with the financial needs of the sugar company	1.3(1)	7.8(6)	35.1(27)	42.9(33)	13(10)	3.58	0.86
Asset management really determines profitability of the sugar company	1.3(1)	10.4(8)	32.5(25)	44.2(34)	11.7(9)	3.55	0.88
Efficient utilization of fixed and current assets has a bearing on profitability of the sugar company	1.3(1)	2.6(2)	46.8(36)	39(30)	10.4(8)	3.55	0.77
The maintenance and disposal approach taken regarding the fixed assets has led to increase in profitability of the sugar company	1.3(1)	5.2(4)	48.1(37)	32.5(25)	13(10)	3.51	0.84
Generally, asset controls influences the sugar company's profitability	1.3(1)	2.6(2)	37.7(29)	54.5(42)	3.9(3)	3.57	0.68
Overall						3.55	

From Table 1, 42.9% of the sampled respondents agreed that fixed asset and current asset portfolio was appropriately matched with the financial needs of the sugar company and additional 13% strongly agreed. A mean of 3.58 suggested that fixed asset and current asset portfolio was appropriately matched with the financial needs of the sugar company. Mawih (2014) indicated that the structure and portfolio of asset had a bearing on financial performance of firms in Oman. The results also revealed that 55.9% of the respondents agreed that asset control really determined profitability of the sugar company with a mean of 3.55. Sound asset performance management is a prerequisite for a financial performance and organization stability and continuing profitability, while deteriorating asset performance management is the most frequent cause of poor financial performance and condition (Sagwa &Kembu, 2016). The management of short-term assets is as important as the management of long-term financial assets, since it directly contributes to

the maximization of a business's profitability, liquidity and total performance.

In regard to efficient utilization of fixed and current assets, 46.8% were undecided. However, 39% of the respondents agreed and 10.4% strongly agreed that efficient utilization of fixed and current assets have a bearing on profitability of the sugar company. Therefore, efficiency in the use of fixed assets should be judged in relation to firm performance. Olatunji (2014) opined that efficient utilization and control and management of acquired fixed assets are also equally important. Appropriate acquisition process, proper record keeping, periodically evaluating the efficiency of the fixed asset, regular repair and maintenance and proper disposal of fixed assets will enhance the performance of firms (Mawih, 2014). Similarly, 48.1% of the respondents were undecided that maintenance and disposal approach taken regarding the fixed assets has led to increase in profitability of the sugar company as compared to

32.5% and 13% who agreed and strongly agreed respectively.

Lastly, respondents agreed that asset controls influences the sugar company's profitability as indicated by a mean of 3.57 with 54.5% of the respondents agreeing and 3.9% strongly disagreeing that generally, asset controls influences the sugar company's profitability. This assertion was supported by numerous authors. Gautam (2008) found out that high fixed cost can deplete a company's profit especially if sales fall. On the other hand, Okwo et al. (2012) showed that investment in fixed asset does

not have any strong and statistical impact on the profitability of brewery firms in Nigeria.

Accounting Control System

Account control system variable was used in the second objective which sought to establish the influence of accounting control system on profitability of sugar manufacturing firms in Western Kenya. The results were presented in Table 2 in which percentage are presented outside brackets while frequency in the brackets. The agreement ranged from 1 strongly disagree, 2-Disagree, 3-undecided, 4-agree and 5 strongly agree. SDV is the standard deviation.

Table 2: Accounting Control System

Statement	1	2	3	4	5	Mean	SDV
There are effective accounting risk control checks in the company	0(0)	5.2(4)	32.5(25)	50.6(39)	11.7(9)	3.69	0.75
There are efficient accounting information system checks in the sugar company	1.3(1)	9.1(7)	29.9(23)	54.5(42)	5.2(4)	3.53	0.79
The accounting processes in the sugar company are up to the required standards	0(0)	6.5(5)	29.9(23)	59.7(46)	3.9(3)	3.61	0.67
The company operates within the cost accounting standards to adequately address operational and supplier related costs	2.6(2)	7.8(6)	36.4(28)	40.3(31)	13(10)	3.53	0.91
The company receives cash discounts from its suppliers upon payment within a stipulated period of time	2.6(2)	9.1(7)	41.6(32)	33.8(26)	13(10)	3.45	0.93
Overall mean						3.56	

The finding in Table 2 revealed that 50.6% of the respondents agreed that there are effective accounting risk control checks in the company and 11.7% strongly agreed. A mean of 3.69 implied that respondents agreed that there are effective accounting risk control checks in the company. Similarly, 54.5% of the respondents agreed that there are efficient accounting information system checks in the sugar company and 3.9% strongly agreed on the same. A mean of 3.53 indicated that sugar companies have efficient accounting information system checks in place. It was also revealed that 59.7% of the respondents agreed that the accounting processes in the sugar company are up to the required standards

while 3.9% strongly agreed. A mean of 3.61 showed that accounting processes in the sugar company are up to the required standards. According to Rotich (2017), accounting control system has an impact on the efficiency of manufacturing firms in Kenya in terms of effective management, decision making and controlling operations.

The results further revealed that 40.3% and 13% of the respondents agreed and strongly agreed respectively that the company operates within the cost accounting standards to adequately address operational and supplier related costs. A mean of 3.53 implies that the company operates within the

cost accounting standards to adequately address operational and supplier related costs. Bukenya (2014) perceived accounting standard are generally relevant, reliable, understandable, accurate and timely enough to facilitate sound decision-making in sugar industry in Uganda. This meant that the decision makers received a high level of accountability to enhance positive decision-making that would lead to high levels of financial performance. It was no wonder that financial performance was fairly good in all the divisions exceeding the revenue performance expectations. On the other hand, 41.6% of the respondents were undecided whether the company receives cash discounts from its suppliers upon payment within a stipulated period of time with a mean of 3.45.

However, 33.8% and 13% of the respondents agreed and strongly agreed respectively that the company receives cash discounts from its suppliers upon payment within a stipulated period of time. A mean of 3.45 implies that some of respondents were not

sure whether the sugar manufacturing firms receive cash discount due to prompt payment. However, Kungu (2015) established that manufacturing firms received cash discounts from its suppliers upon payment within a stipulated period of time. Therefore, as argued by Horne and Wachowiuz (2005), a firm must weigh the advantages of paying cash and therefore receive cash discount and the possibility of losing cash discount, and any possible late payment penalties.

Audit Control

Audit control variable was used in the third objective which sought to establish the influence of audit control on profitability of sugar manufacturing firms in Western Kenya. The results are presented in Table 3 in which percentage were presented outside brackets while frequency in the brackets. The agreement ranged from 1 strongly disagree, 2-Disagree, 3-undecided, 4-agree and 5 strongly agree. SDV is the standard deviation.

Table 3: Audit Control

Statement	1	2	3	4	5	Mean	SDV
There are audit standards to enforce independent audit services and reports	5.2(4)	10.4(8)	29.9(23)	46.8(36)	7.8(6)	3.42	0.96
The company utilizes both internal and external auditors with integrity	2.6(2)	16.9(13)	35.1(27)	35.1(27)	10.4(8)	3.34	0.97
The external and internal auditors execute their audit role professionally in accordance with the modern professional auditing principles	5.2(4)	14.3(11)	36.4(28)	40.3(31)	3.9(3)	3.23	0.93
There are secure and trusted internal audit controls to independently report financial malpractices	2.6(2)	11.7(9)	49.4(38)	29.9(23)	6.5(5)	3.26	0.85
There are periodic forensic audits in the sugar company to detect financial malpractices	3.9(3)	14.3(11)	32.5(25)	39(30)	10.4(8)	3.38	0.99
Overall Mean						3.33	

From Table 3, 46.8% and 7.8% of the respondents agreed and strongly agreed that there were audit standards to enforce independent audit services and reports. A mean of 3.42 implied that respondents were undecided that there are audit standards to

enforce independent audit services and reports. Similarly, 35.1% of the respondents were undecided on whether the company utilizes both internal and external auditors with integrity with a mean of 3.34. However, 35.1% of the respondents agreed and

10.4% strongly agreed that the company utilizes both internal and external auditors with integrity. The coordination of internal audit activity with external audit activity is very important from both points of view: from external audit's point of view is important because, in this way, external auditors have the possibility to raise the efficiency of financial statements audit; the relevancy from internal audit's point of view is assured by the fact that this coordination assures for the internal audit a plus of essential information in the assessment of risks control (Pop, Bota-Avram, & Bota-Avram, 2008).

The results further revealed that 40.3% and 3.9% of the respondents agreed and strongly agreed respectively that external and internal auditors execute their audit role professionally in accordance with the modern professional auditing principles. A mean of 3.23 implies that utilization of external and internal auditors execute their audit role professionally in accordance with the modern professional auditing principles was moderately practiced. Small majority of the respondents (49.4%) were undecided that there are secure and trusted internal audit controls to independently report financial malpractices with a mean of 3.26. However, 29.9% of the respondents agreed and 6.5% strongly agreed that there are secure and trusted internal audit controls to independently report financial

malpractices. Ironkwe and Ordu (2015) indicated that internal auditors at all times should be adequately independent of members of various departments within the organization so that they can carry out their duties effectively.

Lastly, 39% and 10.4% of the respondents agreed and strongly agreed respectively that there are periodic forensic audits in the sugar company to detect financial malpractices. A mean of 3.38 implies that periodic forensic audits in the sugar company to detect financial malpractices are moderately utilized. According to Abdi (2017) found out that forensic audit services have their highest application in the control of financial statement fraud, detection of scandals in the bank, ensuring regulatory compliance, internal controls monitoring and evaluation, and enhancing financial reporting quality.

Budgetary Control

Budgetary control variable was used in the fourth objective which sought to determine the influence of budgetary control on profitability of sugar manufacturing firms in Western Kenya. The results were presented in Table 4 in which percentage were presented outside brackets while frequency in the brackets. The agreement ranged from 1 strongly disagree, 2-Disagree, 3-undecided, 4-agree and 5 strongly agree. SDV is the standard deviation.

Table 4: Budgetary Control

Statement	1	2	3	4	5	Mean	SDV
There is collaborative budget making processing the company	5.2(4)	16.9(13)	31.2(24)	36.4(28)	10.4(8)	3.30	1.04
The budgetary estimates are in line with the company's budgetary needs	1.3(1)	26(20)	32.5(25)	28.6(22)	11.7(9)	3.23	1.01
There is timely approval of all budget estimates	0(0)	18.2(14)	40.3(31)	27.3(21)	14.3(11)	3.38	0.95
The budget allocations match company expenditures	0(0)	14.3(11)	41.6(32)	29.9(23)	14.3(11)	3.44	0.91
Generally, budgetary controls influence company's profitability	2.6(2)	10.4(8)	26(20)	44.2(34)	16.9(13)	3.62	0.97
Overall mean						3.39	

Table 4 showed that 36.4% and 10.4% of the respondents agreed and strongly agreed respectively that there was collaborative budget making processing the company. A mean of 3.30 implied that collaborative budget making processing was moderately used in some sugar firms. Mwaura (2010) concluded that collaboration in budget participation affect financial performance of the companies. He argued that the act of participation in the budgeting process serves as a function by inducing subordinate to accept and commit to their budget goals. Similarly, 28.6% of the respondents agreed that the budgetary estimates are in line with the company's budgetary needs while 11.7% strongly agreed. On the other hand, 32.5% of the respondents were undecided that budgetary estimates were in line with the company's budgetary needs with a mean 3.23.

The results also revealed that 27.3% and 14.3% of the sampled respondents agreed and strongly agreed respectively that there is timely approval of all budget estimates. However, small majority of the respondents were undecided that there is timely

approval of all budget estimates as shown by 4.03% with a mean of 3.38. Similarly, 39.9% and 14.3% of the sampled respondents agreed and strongly agreed that budget allocations match company expenditures. However, 41.6% of the respondents were undecided whether allocations match company expenditures with a mean of 3.44. Lastly, 44.2% of the respondents agreed that generally, budgetary controls influence company's profitability while 16.9% strongly agreed. A mean of 3.62 implies that respondents agreed that generally budgetary controls influence company's profitability. This result mirrors Koech (2015) who found out that budgetary control influences performance of manufacturing firms listed in NSE.

Company Profitability

Company Profitability variable was as dependent variable. The results were presented in Table 5 in which percentage were presented outside brackets while frequency in the brackets. The agreement ranged from 1 strongly disagree, 2-Disagree, 3-undecided, 4-agree and 5 strongly agree. SDV is the standard deviation.

Table 5: Company Profitability

Statement	1	2	3	4	5	Mean	SDV
The company has the ability to generate surplus cash and project future profits from its assets growth	9.1(7)	22.1(17)	24.7(19)	22.1(17)	22.1(17)	3.26	1.28
The company has the ability to utilize its assets efficiently to generate returns	6.5(5)	5.2(4)	49.4(38)	39(30)	100(77)	4.21	0.82
The company has had good improvement on return on assets in the last three years	1.3(1)	14.3(11)	11.7(9)	54.5(42)	18.2(14)	3.74	0.97
The company has adequate current assets to pay for its current liabilities and meet shorter financial obligations	3.9(3)	23.4(18)	3.9(3)	42.9(33)	26(20)	3.64	1.21
The company returns are profitable relative to its assets in the last three years	18.2(14)	19.5(15)	9.1(7)	36.4(28)	16.9(13)	3.14	1.40
The process of acquisition of assets are tied to the company's long term loans	1.3(1)	7.8(6)	29.9(23)	50.6(39)	10.4(8)	3.61	0.83

The company has better return on assets than the industry average	3.9(3)	14.3(11)	18.2(14)	37.7(29)	26(20)	3.68	1.13
The company has experienced an increase in its asset base in the past three years	14.3(11)	28.6(22)	7.8(6)	35.1(27)	14.3(11)	3.06	1.34

Overall

3.54

The results in Table 5 showed that 22.1% of the respondents agreed and the same percentage also strongly agreed that the company had the ability to generate surplus cash and project future profits from its assets growth. However, 24.7% of the respondents were undecided on whether the company had the ability to generate surplus cash and project future profits from its assets growth with a mean of 3.26. On the other hand, 49.4% and 39% of the respondents agreed and strongly agreed respectively that the company has the ability to utilize its assets efficiently to generate returns. A mean of 4.21 implied that sugar firms in western Kenya had ability to utilize its assets efficiently to generate returns.

The results also revealed that 54.5% of the respondents agreed that the company had had good improvement on return on assets in the last three years while 18.2% agreed. A mean of 3.74 indicate that sugar firms had good improvement on return on assets in the last three years. Similarly, 42.9% and 26% of the sampled respondents agreed and strongly agreed respectively that company had adequate current assets to pay for its current liabilities and meet shorter financial obligations. A mean of 3.64 implies that sugar firms had adequate current assets

to pay for its current liabilities and meet shorter financial obligations.

Twenty eight (36.4%) respondents agreed that the company returns are profitable relative to its assets in the last three years and 16.9% agreed on the same. A mean of 3.14 indicated that not all sugar firm had been profitable relative to its assets in the last three years. On the other hand, 50.6% of the respondents agreed that the process of acquisition of assets is tied to the company's long term loans and 10.4% of them agreed. A mean of 3.61 implies that the process of acquisition of assets is tied to the company's long term loans.

The results also revealed that 37.7% and 26% of the respondents agreed and strongly agreed respectively that the company has better return on assets than the industry average. A mean of 3.68 implies that some company has better return on assets than the industry average. Lastly, 35.1% of the respondents agreed that the company has experienced an increase in its asset base in the past three years and 14.3% strongly agreed. A mean of 3.06 implies that some sugar firms have experienced an increase in its asset base in the past three years.

Inferential Statistics

Table 6: Test for Independence

Variable	Durbin Watson
Asset Control	1.436
Account Control System	1.161
Audit Control	1.851
Budgetary Control	1.744

Table 7: Multicollinearity Test

Variable	Tolerance	VIF
Asset Control	.465	2.151
_Accounting Control	.358	2.792

Audit Control	.383	2.610
Budgetary Control	.295	3.391

Table 8: Pearson Correlation Analysis

		AC	ASC	ADC	BC
Asset Control	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	77			
Accounting Control	Pearson Correlation	.657**	1		
	Sig. (2-tailed)	.000			
	N	77	77		
Audit Control	Pearson Correlation	.282*	.375**	1	
	Sig. (2-tailed)	.013	.001		
	N	77	77	77	
Budgetary Control	Pearson Correlation	.229*	.596**	.761**	1
	Sig. (2-tailed)	.045	.000	.000	
	N	77	77	77	77
Profitability	Pearson Correlation	.517**	.683**	.774**	.729**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	77	77	77	77

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

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

Table 9: Multiple Regression Analysis

Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.899 ^a	.808	.798	.22017		

a. Predictors: (Constant), Budgetary control, Asset control, Accounting control system, Audit control

b. Dependent Variable: Profitability

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14.716	4	3.679	75.899	.000 ^b
	Residual	3.490	72	.048		
	Total	18.207	76			

a. Dependent Variable: Profitability

b. Predictors: (Constant), Budgetary control, Asset control, Accounting control system, Audit control

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.549	.177		3.040	.003
	Asset control	.177	.055	.245	3.234	.002
	Accounting control system	.205	.075	.235	2.728	.008
	Audit control	.336	.062	.454	5.444	.000
	Budgetary control	.153	.067	.216	2.277	.026

a. Dependent Variable: Profitability

Regression Coefficients

From the regression coefficient, the study utilized unstandardized regression coefficient in the formulation of study model. The study has an option of either using Unstandardized Coefficients or Standardized Coefficients depending on the type of data. The study used unstandardized coefficient column because we want to compare financial control influence across same measures (Likert Scale 1 through 5). A regression of the four predictor variables against profitability established the multiple linear regression model as below as indicated.

$$\text{Profitability} = 0.549 + 0.177X_1 + 0.205X_2 + 0.336X_3 + 0.153X_4$$

Where;

X_1 = Asset control

X_2 = Accounting control system

X_3 = Audit control

X_4 = Budgetary control

ε = the error of term

All factors had significant positive influence on the profitability as shown by B coefficients. If the four factors are held at zero or it is absent, the profitability of sugar manufacturing firms would be 0.549, $p=0.003$.

The results revealed that asset control had significant positive influence on profitability with $B=.177$ $p=.002$ implying that controlling of other variables (accounting control system, audit control and Budgetary control) in the model, a unit change in asset control would result to significant change in profitability by 0.177 units in the same direction ($P<0.05$). Therefore, therefore asset control has significant positive influence of profitability of sugar manufacturing firms. Efficient utilization and management of asset would results to increase in profits. Efficient utilization and control and management of acquired fixed assets are also equally important. Appropriate acquisition process, proper

record keeping, periodically evaluating the efficiency of the fixed asset, regular repair and maintenance and proper disposal of fixed assets will enhance the performance of firms (Mawih, 2014).

The coefficient of accounting control system was 0.205, which was significant ($p=.008$). When the variance explained by all other variables (asset control, audit control and budgetary control) in the model is controlled, a unit change in accounting control system would result to change in profitability by 0.205 units in the same direction. Therefore, there is adequate evidence to reject second null hypothesis since accounting control System has significant influence on profitability of sugar manufacturing firms in Western Kenya. The findings are comparable to Nunow (2016) who established that accounting control system had a positive relationship with profitability of small and medium-enterprises profitability in Nairobi. Makori (2016) also established that accounting control system decisions have significant positive effect on all profitability measures. In Nigeria, contrary results were obtained by Ademola (2014) whereby, accounting control system had a negative significant effect with the profitability ratio. Cherrington & Cherrington (1973) reported negative relationship between budget participation as function of budgetary control and performance.

Audit control also had significant positive influence on profitability ($B=.336$, $p=.000$). When other variables in the model are controlled (accounting control system, asset control and Budgetary control), a unit change in audit control would result to significant change in profitability by 0.336 units in the same direction. From the study findings, the study rejected the third null hypothesis as audit control had a significant positive influence of profitability of sugar manufacturing firms in Western Kenya. Improvement in audit controls would results to realization of profitability. The findings agree with Kinyua (2016) who concluded that audit control system is a positive

significant predictor of profitability of 62 companies quoted in Nairobi Securities exchange. In Pakistan, Arshad et al. (2011) concluded that there is positive effect of an audit committee on firm's profitability ratio and on firm's performance of firms listed on the Karachi Stock Exchange (KSE).

Budgetary control had also significant positive influence on the profitability ($B=0.153$, $p=.026$) implying that when other variables in the model are controlled (accounting control system, audit control and asset control), a unit change in budgetary control would result to significant change in profitability by 0.153 units in the same direction. Basing on the findings, the study rejected the fourth null hypothesis as $P<0.05$. This implies that budgetary control has a significant positive influence on the profitability. Increase in budgetary control would result to increase in profitability. The results were similar to Chircir and Simiyu (2017) who found out that that change in profitability of ABGL was influenced by the four factors studied under budgetary control (human factors, monitoring and evaluation). Manoj and Rajesh (2017) reflected the budgetary control had a statistically significant effect on profitability in Nepal Oil Corporation (NOC). However, Serem (2013) established that there is a weak positive effect of budgetary control on performance of Non-Governmental Organization's in Kenya.

Testing Null Hypotheses

The hypotheses testing were based on regression coefficient table results for multiple linear regression analysis. This was arrived by using significance level of unstandardized B coefficient. The significance level was set at $P<0.05$; therefore, B coefficient which had significance level less than 0.05 was considered significant and therefore, the null hypothesis was rejected.

H₀₁: Asset control has no significant influence on profitability of sugar manufacturing firms in Western Kenya.

H_{A1}: Asset control has significant influence on profitability of sugar manufacturing firms in Western Kenya.

B Coefficient results: ($B_1 = 0.177$; $p=0.002<0.05$)

Verdict: The null hypothesis **H₀₁** was rejected.

Results interpretation: **H_{A1}:** Asset control has significant influence on profitability of sugar manufacturing firms in Western Kenya.

H₀₂: Accounting control System has no significant influence on profitability of sugar manufacturing firms in Western Kenya.

H_A: Accounting control System has significant influence on profitability of sugar manufacturing firms in Western Kenya.

B Coefficients results: ($B_2 = 205$; $p=0.008<0.05$)

Verdict: The null hypothesis **H₀₂** was rejected.

Results interpretation: **H_{A2}:** Accounting control System has significant influence on profitability of sugar manufacturing firms in Western Kenya.

H₀₃: Audit Control has no significant influence on profitability of sugar manufacturing firms in Western Kenya.

H_{A3}: Audit Control has significant influence on profitability of sugar manufacturing firms in Western Kenya.

B Coefficient results: ($B_3 = 0.336$; $p=0.000<0.05$)

Verdict: The null hypothesis **H₀₃** was rejected.

Results interpretation: **H_{A3}:** Audit Control has significant influence on profitability of sugar manufacturing firms in Western Kenya.

H₀₄: Budgetary control has no significant influence on profitability of sugar manufacturing firms in Western Kenya.

H_{4A}: Budgetary control has significant influence on profitability of sugar manufacturing firms in Western Kenya.

B Coefficient results: ($B_4 = 0.153$; $p=0.026<0.05$)

Verdict: The null hypothesis **H₀₄** was rejected.

Results interpretation: **H_{A4}:** Budgetary control has significant influence on profitability of sugar manufacturing firms in Western Kenya.

CONCLUSIONS

The findings indicated that asset control has significant influence on profitability of sugar manufacturing firms in Western Kenya. Therefore, the study concluded that asset control influences sugar manufacturing firms' profitability. Improvement in asset control would result to increase in profitability of sugar manufacturing firms. The fixed asset and current asset portfolio is appropriately matched with the financial needs of the sugar company although there was some deviation as some firms did not match their asset portfolio and financial needs appropriately.

The findings indicated that accounting control System has significant influence on profitability of sugar manufacturing firms in Western Kenya. There was adequate evidence to conclude that accounting control system influences profitability of sugar firms. It can be deduced that efficient and effective accounting control system would result to profitability of sugar firms. Sugar manufacturing firms in western Kenya were found to have effective accounting risk control and information system checks. However, few companies received cash discounts from its suppliers upon payment within a stipulated period of time.

The findings also revealed that audit Control has no significant influence on profitability of sugar manufacturing firms in Western Kenya. Therefore, the study failed to accept the third null hypothesis as audit control influence profitability of sugar manufacturing firms. Improvement and better implementation of auditing control would result to increase in profitability of sugar manufacturing firms. There was great deviation in the use of both internal and external auditors with integrity meaning that some sugar firm in western Kenya did not utilize both internal and external auditors. The firms sparingly use forensic audit to detect financial practices which has resulted to loss of asset.

Lastly, the study concluded that budgetary control has significant influence on the profitability of sugar manufacturing firms in western Kenya. The fourth hypothesis was therefore rejected. Proper and efficient budgetary control would result to realization of profitability in sugar manufacturing firms. Less than half of the firms were found to have collaborative budget making process implying that their budgetary estimates are in line with the company's budgetary needs. Further, less than half of firms had their budget estimates timely approved.

RECOMMENDATIONS

In order to improve sugar manufacturing firms profitability there should be efficient control of both fixed and current assets. The firms should improve the level of fixed assets investments and the fixed assets should be utilized effectively and productively in order to boost their profitability. The management should also have a proper mix of asset portfolio so as to appropriately match with the financial needs of the sugar industry.

The study recommended that the management of sugar manufacturing firms should ensure that they receive cash discounts from its suppliers upon payment within a stipulated period of time. This can be achieved if the firms are able to monitor their working capital so that there is a tradeoff between creditors' payment period and debtor payment period. The firms should know when to shorten or lengthen their creditor repayment period.

Thirdly, the study recommended sugar manufacturing firms should utilize both external and internal auditors with strict observation of audit standards. This would ensure audit control practices are done professionally with integrity. Sugar manufacturing firms should also undertake periodic forensic audits to detect financial malpractices and therefore increase their profitability.

Lastly, the study recommended that sugar manufacturing firms' management should have a

collaborative budget making processing with bottom up approach where all departments are involved during budget making process. This would ensure budget allocations match firm expenditure and budgetary estimates are in line with the company's budgetary needs.

Areas for Further Research

The study sought to establish influence of financial control on the profitability of sugar manufacturing firms in Western Kenya. The study limited itself to

sugar manufacturing sector, however, there is need for further studies to consider other industry that have great contribution to the economy especially financial institutions. Corporate governance dedicate financial control practices of organization, therefore, further study should consider inclusion of third moderating variable preferably corporate governance to establish its influence on the relationship between financial controls especially audit control and budgetary control on profitability of sugar firms.

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