THE EFFECT OF DEBTORS’ APPROVAL ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA
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Abstract

Purpose: The main objective of this study is to establish the effect of debtors’ approval on the financial performance of manufacturing firms in Kenya. Manufacturing firms have been experiencing a number of challenges in their application of debtors’ approval to ensure sound financial performance.

Methodology: The study adopted two research designs; descriptive and causal. The accessible population for the study was 558 registered manufacturing firms. Stratified sampling technique was used to select the sample size and a sample of 233 manufacturing firms was arrived at using Yamane’s formula. Questionnaires were the main instruments used to collect primary data. Both descriptive and inferential statistics were utilized in data analysis with the aid of SPSS. Data presentation methods used included frequency tables and percentages. Data collected were tested using, univariate test to provide an insight using both parametric (F-test) and non-parametric test (Pearson correlation coefficient). Multivariate analysis was also carried using the multiple regression analysis which indicated the level of the relationship that existed between the independent variables and the dependent variable.

Results: Findings indicate that the credit collection practices have a significant positive effect on the financial performance of the manufacturing firms (p<0.05). This can be attributed to the fact that owners of manufacturing firms have the ability to control and manage credit through their experienced and skilled credit managers. In conclusion, credit collection practices positively and significantly affected the financial performance of the firms.

Unique contribution to Theory, Practice and Policy: The study recommends that registered manufacturing firms operating in Kenya should adopt debtors’ approval since it positively and significantly affects the financial performance.

Keywords: Financial Performance, Debtors Approval, Manufacturing Firms, Client’s Collateral and Firm Size.
1.0 INTRODUCTION

Financial performances of firms listed on the Nairobi Securities Exchange have an inverse relationship between capital structure and financial performance of listed firms in securities exchange in Kenya. The higher the debt ratio, the less the return on equity which therefore supports the need for more equity injection rather than borrowing, as the benefits of debt financing are less than its cost of funding (Siro, 2013). Net portfolio of loan in Kenyan firms grew by 13.3%, but the profit before tax dropped by 19% between the years 2010 and 2011 (CBK, 2011). However, decrease in profits was thought to be attributed to increased provision for nonperforming loans which constitutes credit risk. Credit standards are the guidelines issued by a firm that are used to determine a customer’s creditworthy, they are often created after careful analysis of past borrowers and market conditions, and are designed to limit the risk of a borrower not making credit payments or defaulting on loaned money (Kalunda & Kabiru, 2012). Financial performance involves performing financial activity. It is the degree to which financial objectives have been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms (Leah, 2008).

It is used to measure the overall financial health of a firm over a given period of time and to compare similar firms across the same industry or to compare industries or sectors in aggregation (Kljelly, 2004). To intelligently understand, analyse, and interpret financial statements it is crucial to search for the right information, know where to locate it, and then act swiftly on the findings by analysing how credit management practices and financial performance correlate, since a firm using weaker credit management practices, plus other contributing factors is likely to experience financial performance challenges (Oyadonghan & Bingilar, 2014). The main cause of adverse financial challenges in the manufacturing sector has been attributed by Continued laxity in credit standards for borrowers and counterparties, (Ogilo, 2012).

In Japan, credit sales to customers must be well monitored because regardless of an organization’s share of the market and demand for its products, if there are no measures put in place to regulate sales made on credit, challenges relating to financial performance may arise (Myers, 2012). In Turkey, the limits set on outstanding balances and how to deal with delinquent accounts so that they may not interfere with the firm’s financial performance are highly monitored to minimize defaults (Dogan, 2013). Low financial performance of broiler farmers in South Western Parana is related to management procedures, health and environmental challenges, or other issues (Mendes, Gadoski, Cargnelutti, Silva, Carvairo & Morello, 2014).

Adequate credit management practices are essential for obtaining good broiler performance since broiler production cycle is short, and therefore any challenges are not likely to be corrected during the flock’s life cycle and consequently, may compromise final broiler performance (Mendes et al., 2014). The financial institutions in Pakistan have their crucial ways for financing activities and for providing all types of activities related to finance. Increasing financial performance improves financial activities. Financial performance of financial institutions is well advanced in its measurement within the field of finance and management. These financial institutions are constituent of good financial system and assist the investors to obtain capital and money market in a country (Munir, Muhammed, Rao & Muhammed, 2012). There are many different measures that could be used to assess a debtor’s
capacity to service their account. For example, in the United Kingdom (UK) the length of time they have been in business, bank or trade references, and credit agency checks is one of the measures. Most of small businesses do not have a written customer credit policy (Chittenden, Poutziouris & Michaelas, 2008).

Debt financing in a business puts an owner a task to carefully consider the advantages and disadvantages of taking out loans or seeking additional investors. The decision involves weighing and prioritizing numerous factors to decide which method will be most beneficial in the long-term basing on the repayment restrictions and interest rates. This tends to highlight the poor credit management practices of small business and their inability to assure adequate cash flow through efficient and effective management of accounts receivable (Chittenden et al., 2008). Generally, in the United States, the longer a debt remains outstanding, the greater the risk of it becoming uncollectible hence vulnerability of the firm’s financial performance (Aubuchon & Wheelock, 2010). Non-payment or late payment by debtors inhibits cash flows and leaves the firm with outstanding debts in China. This in turn will interfere with the financial performance of the firm (Lei & Song, 2013) and could result in debtors imposing penalties or refusing goods or services which directly inhibit servicing customers less than half of all enterprises perform any form of check on a company before granting credit to them (Lei & Song, 2013).

Statement of the Problem

Adoption of credit management practices by manufacturing firms has greatly improved their financial performance (Kaplan & Bernadette, 2008). The overall goal of the manufacturing sector is to increase its contribution to Kenyan GDP by at least 10% per annum. The sector is also expected to raise market share in regional markets from 7% to 15% and attract at least ten large strategic investors in key agro-processing industries, targeting local and international markets (Gitau & Gathiaga, 2017). Financial performance of the manufacturing firms according to the Kenya Economic report 2013 regarding contribution to GDP has remained below the medium-term plan and Vision 2030 targets (Njoroge, 2015). From the year 2015 some manufacturing firms in Kenya have closed their business due to poor performance while others have been forced to relocate their manufacturing plants to other countries because capital productivity in the Kenyan manufacturing sector is particularly low, compared to regional and global productivity levels (Gitau & Gathiaga, 2017). Poor financial performance in the manufacturing sector is a clear reflection of the inadequate utilisation of credit management practices (Edem, 2017).

It is prevalent that 95% of Kenya’s manufactured goods are basic products such as beverages, food, building materials and basic materials (KAM, 2016). The growth pattern for the manufacturing industry in Kenya has not been stable due to poor adoption of credit management practices which among other factors has contributed to declining financial performance (Mogaka & Jagongo, 2013). Manufacturing firms in Kenya have faced a number of challenges one of them being meeting their short-term commitments and they have extended longer credit periods to those buying on credit as they have shorter credit period from creditors (Mogaka & Jagongo, 2013), this in turn affected the operations of the firm making it difficult to meet their current liabilities (Kagoyire & Shukla, 2016). Credit management practices and financial performance are largely correlated, a study by Mwangi
and Muriuki (2013) found that 18 out of 19 respondents indicated that they had a documented credit management practices which is 95% strong agreement. Inadequate adoption of credit management practices by manufacturing firms’ industry has led to higher capital requirements which have raised the cost of credit (Admati et al., 2011). This is a terrific example of static, short-term thinking that has put in to mess the financial performance of manufacturing firms. Recent research survey by Upagade & Shende (2012) posits that higher capital requirements have a very modest effect on the cost of credit and substandard management and preservation of a suboptimal allocation of capital. Important national policy issues will also be affected if the issue of financial performance is not adhered to. Some of the studies that have been done in Kenyan firms on credit management practices include: Olweny, Namusonge and Onyango (2012) established the influence of socio-economic background on individual investor risk tolerance at NSE, the study established the effect of risk tolerance category of the borrower on loan repayment performance, Mungai, Maingi and Muathe (2014) studied loan repayment and sustainability of government funded micro-credit initiatives in Murang’a County, Angaine and Waari (2014) analyzed the factors influencing loan repayment in micro-finance institutions in Kenya, Meru Municipality. None of the above studies clearly focused on the credit management practices on financial performance of manufacturing firms in Kenya. This study therefore sought to fill this gap.

2.0 LITERATURE REVIEW

Asymmetric Information Theory

Asymmetric information theory was introduced by Akerlof (1970). The theory developed asymmetric information with the example case of automobile market. The theory argued that in most of the markets the buyer uses some market statistic to measure the value of a class of goods. The buyer sees the average of the whole market while the seller has more intimate knowledge of a specific item.

Further argument is that this information asymmetry gives the seller an incentive to sell goods of less than the average market quality, the average quality of goods in the market will then reduce as will the market size (Akerlof, 1976). Such differences in social and private returns can be mitigated by a number of different market institutions. Theory proposes that an imbalance of information between buyers and sellers can lead to inefficient outcomes in certain markets, whether a given market is a lemons market along the metrics of Akerlof’s original article. Heal (1976) proposed a refinement of the initial model by determining that the used car market need not be a lemons market if the potential changeability of the agent’s status is incorporated into the model. Heal’s model thus incorporated the fact that the buyer and seller is not static in durable goods markets. The study further expanded the model by taking into account additional endogenous valuation factors, including those pertaining to maintenance and driving habits, rather than purely stochastic elements (Heal, 1976, Akerlof, 1982). Hendel and Lizzeri (1999) noted that a used goods market need not tend towards failure if the market is responsive to the dynamic interactions between the new and used goods market.

Specifically, Hendel and Lizzeri (1999) pointed out the fact that buyers may be able to easily transact in either a used or new goods market for any given good, thus assuring a minimum level of quality in the used goods market based on the possibility of other choices should...
quality tend to drop too precipitously. Although these studies reach different conclusions, they all highlight the importance of information to economic transactions, either by finding market failure in situations of asymmetric information, or by determining that the presence of counteracting institutions forestalls possible market failure by filling the information gap between the buyer and seller (Bowman, 2007). Despite challenges and modifications, Akerlof’s lemons model remains central to information economics. It is because of the theory’s intuitive appeal and its relative success in withstanding empirical scrutiny that the model’s fundamentals, problems of adverse selection and asymmetric information, remain central, hence the legal progeny of Akerlof’s theory. Application of the model has expanded in recent years to take account of a greater number of situations presenting a confluence of legal and economic theory. Katz (2007) has defended pharmaceutical regulation on the basis that the market for pharmaceuticals has the potential to constitute a lemons market in the absence of effective counteracting institutions.

However, such regulation, which ensures quality, prevents the industry from embarking on a race to the bottom. Scholars have noted the deleterious aspects of asymmetric information in the context of the emerging markets for genetically modified food, where a lack of accurate information about the various benefits of engineered food has hindered the broader development of markets in such products. Legal reforms to reduce the potential for asymmetric information in the insured-insurer relationship have also been proposed as an extension of Akerlof’s initial work, most recently in the context of the possibility that genetic information could be used to decline coverage (Dignam & Galanis, 2008). Further academic work has also been undertaken in the context of criminal law sentencing and juvenile expungement regimes, labour and employment contracting, and asset securitization. Each of these diverse applications of the lemons model has approached the economic problem by showing how the law itself can counteract the effects of asymmetric information (Bowman, 2010).

Asymmetric information theory may help to restore the status quo as between the buyer and the seller, but it does not address or otherwise alleviate the underlying fact of asymmetric information (Dignam & Galanis, 2012). The theory has however faced various challenges, the importance and value of information in economic transactions is only likely to increase in the years to come (Mann & Holdych, 2014). Trade, investment, and business can no longer be understood as matters of purely local or national concern between similarly situated buyers and sellers, but rather as transnational affairs, often comprised of multiple parties of multiple nationalities proceeding under potentially multiple conceptions of how the law should operate (Garmaise & Maskowitz, 2015). This conceptual distance between buyers and sellers has the potential to create value uncertainty as part of that value uncertainty, asymmetric information regarding the governing law may arise (Katz, 2015).

**Empirical Review**

**Financial Performance**

Financial performance is an important aspect of financial risk management (Cheruiyot, 2010). On their study, Hgokçehan and Waseem (2014) investigated the factors that affect the financial performance of manufacturing firms listed in Borsa Istanbul, Turkey, during the recent financial crisis during the period 2008-2013, using a sample size of 140 listed firms,
using factor analysis. The study findings suggest that liquidity of the firm affects the firm’s market value positively and that firms with good liquidity perform better during crises period.

According to a study which was done by (Makori, Munene & Muturi, 2013) on the challenges facing deposit-taking SACCOs regulatory compliance in Kenya, Gusii region. The study adopted cross sectional survey research design and it was conducted for a three-year period between 2010-2012. The population of the study was 215 deposits taking SACCOs with a sample size of 30 banks. Data was collected using both primary and secondary methods. Questionnaire was the main tool of data collection. Data was analysed by multiple regression and Pearson correlation analysis. Findings indicated that adoption and implementation of sound credit risk management practices, favourable external business environment, appropriate credit risk policy, and setting of credit risk limits had an impact on the financial performance of the SACCOs. Appropriate credit risk policy was regarded as having the greatest impact on the financial performance of SACCOs in Kenya and that financial analysis of a firm helps in assessing the financial position and the financial performance over a given period of time.

Past literature by Cheptum and Otuya (2016) on the relationship between employee relations and performance of firms in Kenya, which adopted the descriptive research design and target population of 6,335 out of which a sample size of 108 was used for the study? Both primary and secondary methods were used to collect data whereby questionnaire was the main tool of data collection. Inferential and descriptive methods were employed and multiple regression model was used in analysis of data found that, performance of a firm comprises of the actual output or results of a firm as measured against its intended outputs. Ongoing and on-the-job training can help employees succeed in their current job and position them for future responsibilities within the firm. Investments in employee training and development can help to build the firm’s overall capacity enabling it to achieve its business goals hence increasing its financial performance (Cheptum & Otuya, 2016).

**Debtors’ Approval**

A debtor is a person or enterprise that owes money or credit to another party where the party to whom is owed is often a supplier or bank who is referred to as the creditor (Betratti & Rene, 2012). It is a company or an individual who owes money (Adrian & Shin, 2010). If the debt is in the form of a loan from a financial institution, the debtor is referred to as a borrower, and if the debt is in the form of securities, such as bonds, the debtor is referred to as an issuer (Chen & Pan, 2012). Legally, someone who files a voluntary petition to declare bankruptcy is also considered a debtor (Racisi et al., 2014). If a debtor fails to pay a debt, creditors have some recourse to collect it. If the debt is backed by collateral, such as mortgages and car loans being backed by houses and cars, respectively, the creditor can attempt to repossess the collateral. In other cases, the creditor may take the debtor to court in an attempt to have the debtor’s wages garnished or to secure another type of repayment order (Vodova, 2013).

On a study by Kariuki (2010) debtors’ Approval consists of items which are used to measure the importance of various types of information in determining whether a customer receives approval to purchase on credit. In his research, Perry (2015) examined the following items that were used by credit managers to determine whether or not customers were granted credit. Questions related to each of these were included in the survey for the current research:
monitoring of excessive past due payments, repetitive and large bad-debt write-offs, unusual situations resulting in extended credit, identification of credit controls, importance of credit checking and credit information to granting of credit (Kariuki, 2010). The main aim of credit management is management of debtors and financing debts (Chen & Pan, 2012). The objectives of credit management can be stated as safeguarding the companies’ investments in debtors and optimizing operational cash flows (Vodova, 2013). Policies and procedures must be applied for granting credit to customers, collecting payment and limiting the risk of non-payments (Perry, 2015). A study which was done by Kljelly (2004) argued that payments by debtors is the most important factor affecting a firm’s liquidity. Lei and Song (2013) carried out a research on firms in China and found that, non-payment or late payment by debtors inhibits cash flows and leaves the firm with outstanding debts, this could result in debtors imposing penalties or refusing goods or services which directly inhibit servicing customers less than half of all enterprises, perform any form of check on a firm before granting credit (Raeisi et al., 2014).

In 1998 European Business Survey it was noted that small owner-managed firms are less likely to monitor creditor’s worthiness, credit management performance and credit management practices of credit administration receivable, stock levels, profit and loss accounts and outstanding orders or new customers (Betratti & Rene, 2012). Sound credit management will lower the capital that is locked with the debtors, and also reduces the possibility of getting into bad debts (Turyahebya, 2013). Bad debt is a debt that is not collectible and therefore worthless to the creditor. Bad debt is usually a product of the debtor going into bankruptcy but may also occur when the creditor’s cost of pursuing the debt collection activities is more than the amount of the debt. Once a debt is considered bad, the business may be able to write it off as an expense on its income tax return. Many businesses make sales on credit, as it generally allows them to increase their sales but they end up offering credit to clients with less than desirable credit, or they face situations in which their clients cannot pay (Fan & Shaffer, 2004). As a result, firms that make credit sales often estimate the amount of sales they expect to become bad debts, and they record this projection in their allowances for their doubtful accounts (Kariuki, 2010). Both individual and business debtors with histories of bad debts are likely to have their credit rating decline, which makes it difficult for these debtors to access any additional forms of credit.

There are many different measures that could be used to assess a debtor’s capacity the service their account. For example, the length of time they have been in business, bank or trade references, and credit agency checks, Chittendenet al., (1998) on their study, identified that most small businesses do not have a written customer credit policy. This tends to highlight the poor credit management practices of small business and their inability to assure adequate cash flow through efficient and effective management of accounts receivable. Generally, it was agreed that the longer a debt remains outstanding, the greater the risk of it becoming uncollectible (Turyahebya, 2013).

**Conceptual Framework**
3.0 RESEARCH METHODOLOGY

The study adopted two research designs; descriptive and causal. The accessible population for the study was 558 registered manufacturing firms. Stratified sampling technique was used to select the sample size and a sample of 233 manufacturing firms was arrived at using Yamane’s formula. A pilot study was conducted to test for the validity and reliability of the research questionnaire; content validity was used and Cronbach’s alpha to test for reliability. Questionnaires were the main instruments used to collect primary data secondary data collection sheet was used to collect secondary data.

4.0 FINDINGS

4.1 Background Information Results

Analysis on the demographic characteristics of the respondents was done. This included: gender, level of education, duration of operation of the firm, and duration respondents had worked in the firm. A description of the study variables under various sections of the questionnaire was also analyzed.
4.1.1 Gender of the Respondents

The questionnaire required the respondents to indicate their gender by ticking against gender option - male or female. The findings revealed that 150 (68%) of the respondents were male whereas 71 (32%) were female. This implies that, most of the males engage in business activities and are ready to take risks and that’s why most of them are credit officers. This was to ascertain as to whether there was gender balance in the distribution of views as well as indicating that the researcher was compliant with the gender equality rule as required by the Kenyan Constitution (2010), which states that no single gender should be more than two thirds of the total population and that institutions should give equal opportunities to both males and females. Gender distribution is presented in Table 1.

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male   | 150       | 68         |
| Female | 71        | 32         |
| Total  | 221       | 100        |

4.1.2 Level of Education of the Respondents

The study sought to determine the highest level of education of the respondents. Findings from the study indicated that, 122 (55%) of the respondents were holders of Bachelor degree, 52 (24%) were holders of Master degree 44 (20%) of the respondents were holders of Diploma and 3 (1%) were holders of PhD. This implies that, most of the firms when advertising for jobs indicate bachelor’s degree as the minimum qualification (Abbas 2015). There are also organizations who sponsor their employees for degree courses and some offer scholarships which give employees opportunities to further their education. Respondents with Masters were 24% as per the study findings, this is attributed to the fact that some employees having gained experience, opt for masters programs in order to increase their expertise and level of education for better opportunities. Respondents with Diploma degree stood at 20%, this follows the establishment of the technical and vocational education and training Act of 2013. The act aims to expand and improve learning institutions in Kenya by imparting practical and technical skills to the learners. Learners from these institutions have the practical skills to create their own jobs and this explains the small number in employment as evidenced in those in State corporations. Respondents with Doctorate were the least with 1% and this is attributed to the fact that those employees who advance their education to this level prefer to teach at institutions of higher learning as compared to working in the office. As per this study’ findings, majority of the respondents were well above diploma level.

The findings are similar to those found by Abbas (2015) in a similar study where he indicated that a majority of the population had bachelor degrees which are a satisfactory level of education that enables proper understanding of a research questionnaire. This is because the level of education influences the decision made by credit managers as observed by Reeve and Warren (2016). Response on the level of education of the respondents is presented in Table 2.
Table 2: Level of Education of the Respondents

| Level of Education | Frequency | Percentage |
|--------------------|-----------|------------|
| Diploma            | 44        | 20         |
| Bachelors          | 122       | 55         |
| Masters            | 52        | 24         |
| PhD                | 3         | 1          |
| Total              | 221       | 100        |

4.1.3 The Duration of Existence of the Firm

The respondents were asked to indicate the duration in years in which the firm has been in existence. Findings from the study indicated that, 133 (60%) of the firms had existed for a period of five to ten years, 55 (25%) were in operation for a period of ten to fifteen years, 22 (10%) of the firms had been in operation for five years and less, and finally 11 (5%) have been in operation for a period of over fifteen years. This indicated most firms were in operation for a period of five to ten years (60%). This is an implication that, a large number of the manufacturing firms were stable since operation of five years and above is considered long term (Gichaaga, 2014). The above figures imply that the stability and experience of the firm over time was good. Findings are presented in Table 3.

Table 3: Duration of Existence of the Firm

| Duration of Existence | Frequency | Percentage |
|-----------------------|-----------|------------|
| Less than 5 Years     | 22        | 10         |
| 5-10 years            | 133       | 60         |
| 10-15 years           | 55        | 25         |
| Above 15 years        | 11        | 5          |
| Total                 | 221       | 100        |

4.1.4 Work Duration

The respondents were required to state the number of years they had worked with the firm. This was to ascertain the experiences the employees have gained over time. The descriptive findings from the study indicated that 107 (48%) had worked for more than ten years, 88 (40%) had worked for five to ten years, and further 26 (12%) of the respondents had worked for a duration of less than five years. This implies that, most of the respondents from the sampled firms indicated that a minimum of five years’ work experience was considered adequate for an employee to be considered informative on the study hence the information provided was reliable. Findings from previous studies indicates that employees stay in employment for long periods in manufacturing firms leading to lower chances of employee turnover hence higher employee retention due to permanent and pensionable employment terms in most of the firms (Gichaaga, 2014). Findings are presented in Table 4.

Table 4: Work Duration of Respondents

| Duration      | Frequency | Percentage |
|---------------|-----------|------------|
| 0-5 years     | 26        | 12         |
| 5-10 years    | 88        | 40         |
| Over 10 years | 107       | 48         |
| Total         | 221       | 100        |
4.2 Descriptive Analysis

The study sought to establish the views of credit managers of selected registered manufacturing firms in Kenya on debtors’ approval and financial performance. The respondents were required to indicate their level of agreement/disagreement in line with statements on a five- point Likert Scale from 1-5 representing strongly disagree to strongly agree respectively.

4.2.1 Financial Performance

This section presents the findings and discussions on descriptive analysis of the dependent variable. The study carried out a thorough scrutiny on the opinions of credit managers on financial performance of manufacturing firms in Kenya. The results are presented in Table 5 in which the financial performance of registered manufacturing firms in Kenya was measured and the respondents were required to indicate their level of agreement to various statements on financial performance. Majority of the respondents strongly agreed that manufacturing firms have proper marketing strategies which help in boosting their sales volume (Mean=4.83; Std. Dev=0.37). Furthermore, majority of the respondents strongly agreed that firms have adopted value-based management accounting systems to improve return on assets (Mean=4.71; Std. Dev=0.54). The findings indicate that majority of the respondents strongly agree that firms should adopt modern management tools for accounting to ensure consistency in stabilizing earnings per share (Mean=4.79; Std. Dev=0.50). In addition, it is evident from the results that manufacturing firms have adopted an improved and efficient management accounting tools in improving returns on equity (Mean=4.71; Std. Dev=0.73). The study findings are supported by Chijoriga (2007) who posited that if a high turnover means better use of assets owned by the firm and hence better efficiency, a higher profit margin means that the entity has substantial market power. Risk and growth are two other important factors that influence a firm’s financial performance (Cooper & Schindler, 2018). Since market value is conditioned by the firm’s results, the level of risk exposure can cause changes in its market value. Another study which supports these findings is by Hall (2011) who argues that large volume of sales achieved through extensive marketing is a necessary tool which aids in improving performance. Another study by Ameels and Sheipers (2012) argues that a sustainable higher growth rate would have a positive impact on performance for the companies listed at the stock exchange, its ability to distribute dividends is a proof of stability since the use of value-based management accounting system increases the value of shareholders by increasing firms returns in excess of its cost of capital and achievement of the firm’s goals and objectives at large. Results are shown in Table 5 below.
Our firm ensures extensive marketing strategies are in place to boost its sales volume.

We adopt value-based management accounting system to improve our return on assets.

Our firm adopted modern management tools for accounting to ensure consistency in the stabilization of its earnings per share.

Our firm has an improved efficient management accounting tools which facilitates improved return on equity.

| STATEMENT                                                                 | SD | D  | N  | A  | SA | Mean | Std. D |
|---------------------------------------------------------------------------|----|----|----|----|----|------|--------|
| Our firm ensures extensive marketing strategies are in place to boost its sales volume. | 0% | 1% | 0% | 7% | 83%| 4.83 | 0.37   |
| We adopt value-based management accounting system to improve our return on assets. | 0% | 0% | 4% | 21%| 75%| 4.71 | 0.54   |
| Our firm adopted modern management tools for accounting to ensure consistency in the stabilization of its earnings per share. | 1% | 0% | 4% | 13%| 83%| 4.79 | 0.50   |
| Our firm has an improved efficient management accounting tools which facilitates improved return on equity. | 0% | 4% | 4% | 9% | 83%| 4.71 | 0.73   |
| Average                                                                  |    |    |    |    |    | 4.76 | 0.53   |

4.2.2 Debtors’ Approval

The study sought to determine the effect of debtor’s approval on financial performance. The views of the study participants were analyzed. It was noted that majority of the respondents were in agreement that manufacturing firms check the length of time which customers have been in business before granting them credit (Mean=4.31; Std. Dev=0.63). Findings from the study indicated that most of the respondents largely agreed that before giving credit to clients, firms ensure that the size of the firms seeking credit facilities are strictly assessed before making any approvals (Mean=4.39; Std. Dev=0.57). The findings further indicate that respondents agree that firms strictly seek for collateral provisions before appraising customers (Mean=4.21; Std. Dev=0.66).

It was agreed that customers are assessed based on their capacity to repay credit while aiming at reducing credit defaults (Mean=4.30; Std. Dev=0.55). Further, it was revealed that, the firm’s staff are given incentives in improving recovery of delinquent loans (Mean=4.21; Std. Dev=0.51). As to whether firms have competent personnel for carrying out appraisal of customers, respondents were largely in assent (Mean=4.21; Std. Dev=0.41). The research participants were asked if firms use complaints and compliments reports in determining operational risks, and majority were in agreement (Mean=4.35; Std. Dev=0.48). It was found out that majority of the firms have effective credit policies in relation to credit management (Mean=4.35; Std. Dev=0.63). Respondents were asked to indicate if firms use customer credit application forms to improve monitoring and management of credit and they largely agreed (Mean=4.13; Std. Dev=0.45). As to whether firms monitor and evaluate debtors’ credit history before granting them credit, a large number of the respondents were in agreement (Mean=4.35; Std. Dev=0.56).

The mean in relation to whether debtors’ approval affects financial performance was 4.28 which is an indication that the effect was moderate. The standard deviation describes the distribution of the response in relation to the mean. It indicates how far the individual responses to each factor deviates from the mean. A standard deviation of more than 1 shows that the responses are moderately distributed, while less than 1 indicates that there is no agreement on the responses obtained. An average standard deviation of 0.55 for all the descriptions, debtors’ approval indicates that the responses are moderately distributed.
Scholars have carried out studies which relate to the findings of this study. Obudho (2014) supports that firms need more equity to remain viable because bankruptcy is inevitable for an insolvent business if it does not generate enough cash flow income to meet its debt requirements in a timely manner. The period in which customers have been in business is a very important ingredient considered before granting credit (Reeve et al., 2018). In periods during which the firms enjoy enough liquidity, they cannot satisfy the required resources from debt without conversion of the asset into liquidity by reasonable cost. In this stage, the company is said to experience a liquidity risk (Moti et al., 2012). Liquidity risk is the probability that the organization shall not be able to make its payments to creditors, as a result of the changes in the proportion of long-term credits and short-term credits and the correlation with the structure of organization’s liabilities (Obudho, 2014).

A study done by Amarjit, Manjeets, Neil, and Harhnder (2014) posits that operational efficiency is the extent to which changes in the cash conversion cycle, operating expenses to sales revenue ratio, operating cash flow, and total asset turnover, total debt to total assets ratio, firm size, and operating risk impact the future performance of the firm. Efficiency is the product of firm-specific factors such as management skills, innovation, cost control, and market share as determinants of current firm performance and its stability. A study which was done on factors influencing credit management as a strategy on performance of firms in Kenya found that firms should always have competent personnel for carrying out appraisal of customers (Gichuki & Kagiri, 2015). Amarjit et.al, (2014), found a positive impact of operational efficiency on the future performance of Indian manufacturing firms. Results are presented in Table 6 below.

### Table 6: Debtors Approval

| STATEMENT                                                                 | SD | D  | N  | A  | SA | Mean  | Std. D |
|--------------------------------------------------------------------------|----|----|----|----|----|-------|-------|
| We check the length of time in which customers have been in business.    | 0% | 0% | 9% | 51%| 40%| 4.31  | 0.63  |
| Size of firms seeking credit facilities are strictly assessed before making any approvals. | 0% | 0% | 5% | 52%| 43%| 4.39  | 0.57  |
| Collateral provisions are considered as very crucial by our firm while appraising customers. | 0% | 0% | 5% | 65%| 30%| 4.21  | 0.66  |
| Our firm assesses customers’ capacity to repay results in reduction of credit defaults. | 0% | 0% | 5% | 61%| 34%| 4.30  | 0.55  |
| Our firm offers staff incentives in improving recovery of delinquent credit. | 0% | 0% | 4% | 70%| 26%| 4.21  | 0.51  |
| Our firm has competent personnel for carrying out appraisal of customers. | 0% | 0% | 0% | 78%| 22%| 4.21  | 0.41  |
| Our firm uses complaints and compliance reports in determining operational risks. | 0% | 0% | 0% | 65%| 35%| 4.35  | 0.48  |
| Our firm has effective credit policies in relation to credit management. | 0% | 0% | 8% | 48%| 44%| 4.35  | 0.63  |
| Our firm uses customer credit application forms to improve monitoring and management of credit. | 0% | 0% | 4% | 78%| 18%| 4.13  | 0.45  |
| Our firm monitors and evaluates the debtor’s credit history. | 0% | 0% | 4% | 57%| 39%| 4.35  | 0.56  |
| **Average**                                                              |    |    |    |    |    | **4.28**| **0.55**|
4.3 Inferential Analysis

Correlation was done to test the relationship between variables and multiple regressions to determine the relationship between dependent and independent variables.

4.3.1 Correlation Analysis Results

This section presents the correlation of each independent variable and the dependent variable and later carried out an overall correlation between the independent variables and the dependent variable.

4.3.1 Relationship between Debtors’ Approval and Financial Performance

The study examined the relationship between debtor’s approval and financial performance of selected registered manufacturing firms in Kenya. The correlation analysis results are presented in Table 7.

| Table 7: Correlations Coefficients of Debtors' Approval and FP |
|---------------------------------------------------------------|
| Debtor’s Approval                                           | Financial Performance |
| Pearson Correlation                                         | 0.660 |
| Sig. (2-tailed)                                              | 0.033 |
| N                                                            | 221 |

Pearson correlation coefficient (R) was used to indicate the direction and strength of the relationship between debtor’s approval and financial performance. The study findings indicate that the relationship was positive and significant (r=0.660; p<0.05). This is an implication that debtor’s approval significantly affected financial performance.

4.3.2 Regression Analysis

The study determined a combined effect of debtors’ approval, firm’s age, firm size and client’s collateral on financial performance. Table 4.8 therefore represents the regression results of different credit management practices and financial performance.

| Table 8: Regression Model Summary |
|-----------------------------------|
| Model | R | R Square | Adjusted R Square | R | Std. Error of the Estimate |
|-------|---|----------|-------------------|---|---------------------------|
| 1     | .808a | .653 | .639 | .56778 |

a. Predictors: (Constant), Debtors’ Approval, Firm’s Age, Firm Size and Client’s Collateral
b. Dependent Variable: Financial Performance

From the results obtained, an R of 0.808 (R=0.808) shows that there is a positive correlation between debtors’ approval and financial performance. The adjusted R square of 0.639 indicates that; debtors’ approval, firm’s age, firm size and client’s collateral in exclusion of the constant variable explained the change in financial performance by 63.9%, the remaining percentage can be explained by factors not included in the model.
The coefficient of determination ($R^2 = 0.653$) indicates that 65.3% of financial performance can be explained by debtors’ approval, firm’s age, firm size and client’s collateral. The remaining percentage can be explained by other factors not investigated by the study and the error term.

**4.3.3 Assessing the Fit of the Multiple Regression Model**

This involved the assessment of the multiple regression model fitness for the data analysed. ANOVA was conducted which aided in identifying whether financial performance could be predicted without relying on credit management practices analysed in the study. ANOVA results are presented in Table 9.

**Table 9: Regression Coefficients**

| Model       | Unstandardized Coefficients | Standardized Coefficients | 95.0% Confidence Interval for B |
|-------------|-----------------------------|---------------------------|--------------------------------|
|             | B                           | Std. Error                | Beta               | t      | Sig. | Lower Bound | Upper Bound |
| (Constant)  | 3.332                       | .375                      |                    | 8.884  | .000 | 2.593       | 4.071       |
| Debtors’ Approval | .321                    | .069                      | .417               | 4.674  | .000 | .457        | .186        |
| Firm’s Age  | .202                       | .030                      | .248               | 2.558  | .001 | .458        | .054        |
| Firm Size   | .212                       | .062                      | .266               | 2.311  | .021 | .107        | .532        |
| Client’s Collateral | .620                     | .091                      | .522               | 6.817  | .000 | .440        | .799        |

a. Dependent Variable: Financial Performance

The t-test results proved that all the independent variables were significant at 5% significance level. All the p-values were less than 0.05 hence the resulting regression equation is indicated in 4.1

$$Y = 3.332 + 0.321X_1 + 0.202X_2 + 0.212X_3 + 0.620X_4 + \epsilon$$

The study findings indicate that debtors’ approval is a significant predictor of financial performance in registered manufacturing firms ($t=4.674; p<0.05$). The study findings also indicate that firm’s age is a significant predictor of financial performance in registered manufacturing firms ($t=2.558; p<0.05$). Further, findings indicated that firm size is a significant predictor of financial performance in registered manufacturing firms ($t=2.311; p<0.05$). The study findings indicate that client’s collateral is a significant predictor of financial performance in registered manufacturing firms ($t=6.817; p<0.05$).

**5.0 SUMMARY CONCLUSIONS AND RECOMMENDATIONS**

**5.1 Summary of findings**

Findings revealed that firms check the length of time in which customers have been in operation before granting credit, manufacturing firms carry out a thorough assessment of clients before making any approvals regarding credit offering.
Provision of collateral is made mandatory by firms while appraising clients for credit. Furthermore, customers are assessed regarding their capacity to repay in an effort to reduce credit default. Credit managers are awarded incentives to motivate them improve on recovery of delinquent credit. Manufacturing firms have competent personnel who facilitate appraisal of customers, complaints and compliance reports are used by firms to determine operational risks.

The study further found that effective credit risk policies help in credit management and the use of customer credit application forms improve monitoring and management of credit and also firms strictly monitor and evaluate debtors’ credit history before granting credit. The overall mean score of responses regarding debtor’s approval and financial performance indicated that majority of the respondents agreed that debtor’s approval is a key determinant on financial performance of a firm. Correlation analysis results indicated that debtor’s approval was positive and significantly related to financial performance. Based on the results it was concluded that debtor’s approval had a statistically significant effect on financial performance of registered manufacturing firms in Kenya. This was attributed to the fact that manufacturing firms have standards which are effective in reducing credit defaults.

5.2 Conclusion

Debtors’ approval was found to have a significant statistical effect on financial performance of selected registered manufacturing firms. Therefore, it can be concluded that debtor’s approval was statistically significant in explaining the financial performance of selected registered manufacturing in Kenya.

5.3 Recommendations

The study recommends that, manufacturing firms in Kenya should approve debtors before granting them credit. This is attributed to the fact that debtor’s approvals positively and significantly affect the financial performance manufacturing firms in Kenya. Therefore, firms should always check the length of time in which customers have been in operation before granting credit, this could be achieved by carrying out a thorough assessment of clients before making any approvals regarding credit provision.

Further recommendation puts that firms should make it mandatory for clients while appraising them for credit to provide collateral and that customers should be assessed regarding their capacity to repay in an effort to reduce credit default. Consequently, the study recommends that credit managers should be awarded incentives to motivate them hence improving the recovery of delinquent credit. Also, manufacturing firms are recommended to employ competent personnel who should facilitate appraisal of customers, complaints and compliance reports which are used by firms to determine operational risks. The study further recommends that effective credit risk policies should be implemented to help in credit management and these should be used when designing customer credit application forms which will help in improving monitoring and management of credit to evaluate debtors’ credit history before granting credit.

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