# Effect of Client Appraisal on the Profitability of Manufacturing Firms in Kenya

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# Abstract

The objective of the study was to determine the effect of client appraisal on the profitability of manufacturing firms in Kenya. The study was anchored on the Credit Scoring Theory. The study adopted the descriptive research design. The Target population for the study was 1,008 registered manufacturing firms in Kenya, whereas the sample size was 286 unit of analysis which were selected via the stratified random sampling technique. The researcher used primary data which was collected using questionnaires. The statistical package for social sciences version 20 was used in analyzing the collected data. The study conducted the test for normality and the test for linearity so as to confirm the fitness and statistical significance of the simple linear regression model used in this study. The regression coefficients generated from the model were used in testing the hypothesis at .05 level of significance. The p-value of .001 for $H_{01}$ informed the rejection of $H_{01}$. The rejection of $H_{01}$, confirmed that client appraisal has a significant effect on the profitability of manufacturing firms in Kenya. The study therefore, concluded that manufacturing firms in Kenya should focus on investing in client appraisal since they significantly affect their performances. The outcomes from the study would be helpful to managers in the manufacturing firms in making informed decisions with reference to client appraisals. The study also enriched the literature in the field of finance. The study recommends that policy formulating bodies and regulatory bodies should devise policies which support formulation and implementation of client appraisal techniques, this is because it has an overall positive effect on the profitability of manufacturing firms in Kenya.

**Keyword:** *Client Appraisal, Profitability, manufacturing firms, Credit Scoring, Kenya*

## 1.0 Introduction

Client appraisal refers to the various techniques applied in determining the credit worthiness of bowers (Aduda & Gitonga, 2016). Through proper client appraisals, companies' can be able to secure respective incomes while also granting credit to the suitable customers (Beltratti & Rene, 2018). The client appraisal procedure entails assessing the borrower's capacity and any associated unique risks. (Kinyua, 2017).  Client appraisal is used to predict the probability of a borrower defaulting on debt, and also used to assess how severe the losses would be in the event of default (Crook & Banasi, 2016). The outcome of the credit analysis would determine what risk rating to assign the borrower (Kinyua, 2017).  Client appraisal encompasses an assessment of character, capacity and the collateral presented by borrowers before advancing them any credit (Akinleye & Olarewaju, 2019). Character refers to the credit history, which is a borrower's reputation or track record for repaying debts (Abedi, 2019). This information appears on the borrower's credit reports containing detailed information about how much an applicant has borrowed in the past and whether they have repaid the credit on time or not (Adegboye, 2021). Capacity involves assessing the borrowers' ability to repay their debt (Adegboye, 2021). The main goal is to make sure that only credit-worthy consumers are granted credit (Beltratti & Rene, 2018). Collateral gives the lender the assurance that if the borrower defaults, the lender can get something back by repossessing the collateral (Adegboye, 2021). The collateral is often the object for which one is borrowing the credit (Abedi, 2019).

Studies conducted around the globe on the concept of client appraisal have contributed in developing this concept (Lungu & Phiri, 2017). These studies showcase that client appraisal is an integral component for any engagement to borrowers and lenders (Mburu, Mwangi, & Muathe, 2020). This current research study attempted to delve deep in incorporating the client appraisal concept in its study. This current research study therefore, endeavored in establishing the effect of client appraisal on the profitability of manufacturing firms in Kenya.

## 1.1 Problem Statement

The performance of manufacturing companies in Kenya has not been optimal over the years, this can be seen from the collapse of some manufacturing companies such as the Yana Tyres manufacturer Sameer Africa, Athi River Mining, TSS Grain Millers, Spring Industries Ltd as well as Mash Bodybuilders (KAM, 2023). The overall contribution of the manufacturing companies to the Gross Domestic Product (GDP) declined from 9.3% in 2016 to 7.6% in 2022 (KAM, 2023). The collapse of some manufacturing firms as well as the decrease in GDP contribution ushered in decline in new job creation by the manufacturing sector by 187,300 jobs between 2019 and 2020 (KAM, 2023). The decline in GDP contribution and the collapse of these companies can be attributed to poor financial management practices such as inferior credit management practices among them lack of client appraisal (Kimwaki, Ngugi, & Odhiambo, 2022).

Studies conducted around the globe show that proper credit management practices such as client appraisals are essential in ensuring the solvency and long-term survival of organizations (Abedi, 2019). This is because, proper client appraisal enhances the credit worthiness of customers and thus, improve the future financing accessibility (Aduda & Gitonga, 2016). Despite of the significance of client appraisal in entities, limited efforts have been focused in studying this concept in the Kenyan manufacturing sector. The problem in the performance of the manufacturing firms in Kenya as well as the contextual, conceptual and the methodological gaps from the reviewed literature section prompted this current research study. This study, therefore, sought to

address the identified research gaps by researching on the effect of client appraisal on the profitability of manufacturing firms in Kenya.

## 1.2 Research Objective

To determine the effect of client appraisal on the profitability of manufacturing firms in Kenya.

## 1.3 Research Hypothesis

$H_0$:    Client Appraisal has no significant effect on the profitability of manufacturing firms in Kenya
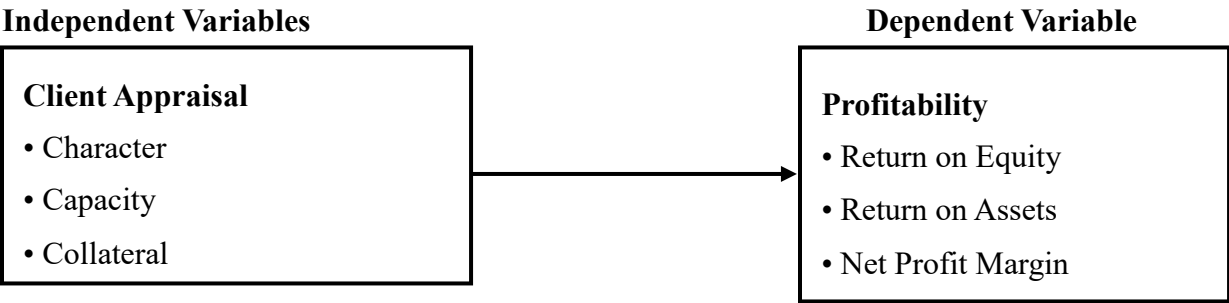
## 2.0 Literature Review

## 2.1 Theoretical Framework

## 2.1.1 Credit Scoring Theory

The credit scoring theory emphases that the first step in lowering credit risk is identifying customers who are eager and able to repay the credit (Crook & Banasi, 2016). To assess a client as a possible borrower, manufacturing companies must employ the 5Cs (Capacity, Collateral, Capital) model of credit (Abedi, 2019). The 5Cs are helpful to owners of manufacturing businesses since they show the applicant's ability to run a business and willingness to repay the credit (Lungu & Phiri, 2017). The credit scoring model is a technique for classifying credit applicants by grouping them into various risk groups based on data from their requests for new or increased credit lines (Mburu, Mwangi, & Muathe, 2020).   Crook and Banasi (2016) emphasizes that capital and collateral are major barriers for companies seeking investment. This is particularly true for new business owners and those who lack assets or funds to use collateral for credit or loan (Kagoyire & Shukla, 2016). This theory is relevant to this current research study as it supports the client appraisal variable. This is because this theory provides mechanism upon which the clients appraisal can be undertaking so as to provide credit rating and scoring before advancing credit.

## 2.2 Conceptual Framework

A conceptual framework is graphical portrayal of the relationship between the variables under investigation (Cooper & Schindler, 2019). The dependent variable for this study was profitability while the independent variable for the study was client appraisal. The conceptual framework for this study was given as shown in Figure 1.

**Independent Variables**                                    **Dependent Variable**

| Client Appraisal | Profitability |
|---|---|
| • Character | • Return on Equity |
| • Capacity | • Return on Assets |
| • Collateral | • Net Profit Margin |

**Figure 1: Conceptual Framework**

## 2.3 Empirical Literature Review, Critique and the Research Gap

Using a descriptive survey design, Kagoyire and Shukla (2016) examined whether credit management influences commercial banks performance in Rwanda. The researchers focused their

study in Equity Bank. The study population consisted of 57 Equity bank staffs working in the credit department. The study by Kagoyire and Shukla (2016) reported that client appraisal affected the financial performance of commercial banks in Rwanda. In Lusaka, Zambia, Lungu and Phiri (2017) performed a critical assessment of credit risk management practices and performance of loans in microfinance institutions. To gain a better understanding of the topic under investigation, a case study research design was used. Both qualitative and quantitative data were collected using questionnaires, interviews, and observations. The collected data was analyzed via SPSS and the researchers reported that client appraisal had a significant effect on performance. Using an explanatory research design and a positivism research approach, Mburu, Mwangi and Muathe (2020) examined the impact of client appraisal on the financial performance of Kenyan manufacturing firms. The researchers used both primary and secondary data which was collected between 2015 and 2018.  The researchers after data analysis concluded that client appraisal affect the Kenyan manufacturing firms' financial performance.

The reviewed studies in the empirical review section were critiqued in this section. The focus of the critique was based on the context of the study, the methodology used as well as how the variables were conceptualized. The conducted critique conducted guided this current research study in arriving at the research gaps which the study endeavored to address. The study by Kagoyire and Shukla (2016) was conducted in Rwanda while the study by Lungu and Phiri (2017) was carried out in Zambia. This current research study was conducted in Kenya. The study by Kagoyire and Shukla (2016) was carried out in the banking industry, while the Lungu and Phiri (2017) was conducted in the MFIs institutions. This current study was carried out in the manufacturing firms in Kenya. The study by Lungu and Phiri (2017) as well as the study by Mburu, Mwangi and Muathe (2020) used the multiple linear regression model. This current study used the descriptive research design as well as the simple linear regression model in undertaking its research study.

## 3.0 Research Methodology

This study employed a descriptive research design. The target population for this study comprised of 1,008 manufacturing firms in Kenya.  The Yamane Taro 1967 formular was used narrowing the target population to a sample size of 286 units of analysis. The stratified random sampling technique was used in selecting the 286 units of analysis out of the target population. The study used questionnaires in collecting the primary for this research study. The collected data was cleaned, coded and analyzed through the Statistical Package for Social Sciences (SPSS) version 20. Data analysis was through descriptive statistics, correlation statistics as well as the regression statistics. Diagnostic tests were conducted on the collected data prior to running the simple linear regression model. The regression coefficients generated from the model were used in testing the research hypothesis at 0.05 level of significance and decision made on whether to reject or fail to reject the null hypothesis. The regression model guiding this study was formulated in the following manner.

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{Equation 3.1}$$

Where: Y = Profitability, $X_1$ = Client Appraisal, $\beta$ = Beta coefficient and $\varepsilon$ = the error term.

## 4.0 Research Findings and Discussion

The findings from this study we presented in following sections.

## 4.1 Diagnostic Test Results

This study carried out the test for normality and the test for linearity so as to determine whether the collected data was fit to be used in running the simple linear regression model.

### 4.1.1 Test for Normality

Normal distribution of the data is confirmed when the normal (Probability to Probability) (P-P) plot tends to follow a liner pattern (Kothari & Garg, 2019). The results for the test for normality for this study were generated and presented in figure 2.
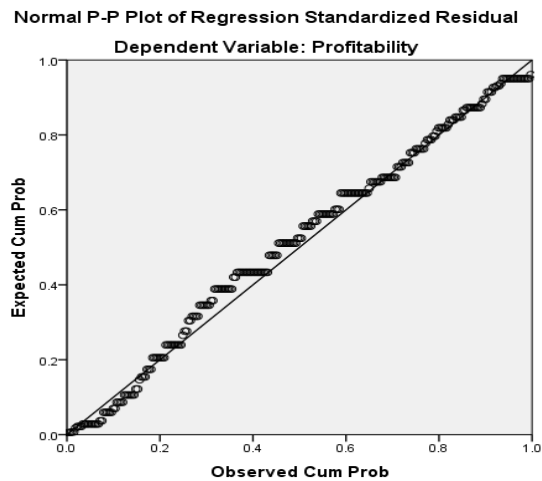


**Figure 2: Normal P-P Plot**

Figure 2 shows that the data points in the P-P plot follow a linear distribution pattern, thus confirming that the data set for this study was normally distributed.

### 4.1.2 Test for Linearity

The presence of linear relationship between the independent and the dependent variables can be confirmed when the scatter plot portray an oval shape distribution (Holmes, 2019). The results for the test for linearity in this study were generated and presented in figure 3.
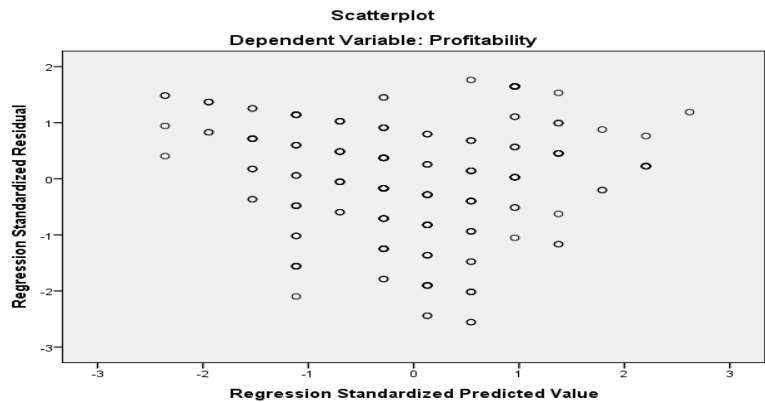


**Figure 3: Scatter Plot**

The oval shape distribution pattern of the scatter plot in figure 3 confirmed the presence of linearity, thus paving way for the successful running of the linear regression model.

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### 4.2 Descriptive Test Results

Descriptive statistics were generated so as to determine the general distribution of the data around the central tendency as well as its dispersion. The descriptive statistics for this study were presented in table 1.

**Table 1: Descriptive Statistics**

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Client Appraisal | 247 | 3.00 | 5.00 | 3.9480 | .40170 |
| Profitability | 247 | 3.67 | 5.00 | 4.4096 | .31973 |
| Valid N (listwise) | 247 |  |  |  |  |

Table 1 gave an overall mean of 3.9480 for the client appraisal variable. The mean score statistic of 3.9480 indicated the general agreement by the respondents that the manufacturing firms in Kenya undertake appraisal of their clients. The standard deviation statistics value of .40170 which was less than the mean statistics indicated that the data for the client appraisal variable was well dispersed around the central tendency. The overall mean statistics of 4.4096 and the standard deviation of .31973 for the profitability variable showed that its data was well dispersed around the mean.

### 4.3 Pearson's Correlation Analysis results

The Pearson's correlation analysis statistics were generated and presented in table 2.

**Table 2: Pearson's Correlation Results**

|  |  | Profitability | Client Appraisal |
|---|---|---|---|
| Profitability | Pearson Correlation | 1 |  |
|  | Sig. (2-tailed) |  |  |
|  | N | 247 |  |
| Client Appraisal | Pearson Correlation | .267** | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 247 | 247 |

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

The pearson's correaltion analysis outcomes presented in table 2 indicated a strong positive ralationship of .267 between client appraisal and the profitability of the manufacturing firms in Kenya. This correlation was significant at .01 level (2-tailed).

### 4.4 Regression Analysis Results

This section presented table 3 for the model summary, table 4 for the ANOVA and table 5 for the regression coefficients.

**Table 3: The Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .681[a] | .464 | .455 | .23609 |

a. Predictors: (Constant), Client Appraisal
b. Dependent Variable: Profitability

The R-square results of .464 in table 3 indicated that over 46.4% of the variability of the dependent variable could be explained by the independent variable, thus indicating that the model was a good fit. These results paved way for the successful application of the simple linear regression model.

**Table 4: The ANOVA**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| | Regression | 1.787 | 1 | 1.787 | 18.745 | .000[b] |
| 1 | Residual | 23.360 | 245 | .095 | | |
| | Total | 25.147 | 246 | | | |

a. Dependent Variable: Profitability
b. Predictors: (Constant), Client Appraisal

The significant F test statistic of .000 in table 4 indicated that the model was fit and statistically significant, thus paving way for the successful running of the simple linear regression model.

**Table 5: The Regression Coefficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 3.572 | .194 | | 18.365 | .000 |
| | Client Appraisal | .212 | .049 | .267 | 4.330 | .000 |

a. Dependent Variable: Profitability

Out of the findings in table 5, the simple linear regression model was fitted as shown in equation 4.1.

$$Y = 3.572 + 0.212X_1 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{Equation 4.1}$$

**4.5 Hypothesis Testing**

The p-value statistics from the regression model in table 5 were used in testing the hypothesis at .05 level of significance. The results for the hypotheses testing were presented in table 6.

**Table 6: Hypothesis Testing**

| Hypothesis Statement | P-value | Decision Rule |
|---|---|---|
| **$H_{01}$:** Client Appraisal has no significant effect on the profitability of manufacturing in Kenya | .000 | Reject **$H_{01}$**, Since P-value $\leq 0.05$ |

### 4.6 Discussion

The objective of the study was to determine the effect of client appraisal on the profitability of manufacturing firms in Kenya. The Statistical Package for Social Sciences (SPSS) version 20 was used in data analysis and the findings were presented in tables, chats and plots. The hypothesis testing in table 6 led to the rejection of $H_{01}$, since the p value of .000 was less than .05. The rejection $H_{01}$, indicated that client appraisal has a significant positive effect on the profitability of manufacturing firms in Kenya. These findings were similar to the findings of Kagoyire and Shukla (2016) who reported that client appraisal affect the financial performance of commercial banks in Rwanda. Similar findings were also reported in Lusaka, Zambia by Lungu and Phiri (2017) in their study on credit risk management practices and performance of loans in microfinance institutions.

### 5.0 Conclusion

Based on the findings from this study, the researcher concludes that client appraisal has a significant positive effect on the profitability of manufacturing firms in Kenya. This conclusion was drawn from the statistical analysis which revealed a strong correlation between client appraisal and the profitability of manufacturing firms in Kenya. The rejection of $H_{01}$ further substantiated the significant positive effect of client appraisal on the profitability of manufacturing firm in Kenya.

### 6.0 Recommendations

The study therefore, recommends that the manufacturing firms in Kenya should embrace client appraisal because it positively affects profitability. Additionally, it is recommended that the manufacturing firms should prioritize continuous evaluation of the client appraisal techniques so as to stay abreast of competition and ensure that the techniques remain effective and relevant.

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