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## **Accounts Receivable Management Practices and Financial Performance of Manufacturing Companies in Rwanda; A Case Study of CIMERWA Plc**

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# Accounts Receivable Management Practices and Financial Performance of Manufacturing Companies in Rwanda; A Case Study of CIMERWA Plc

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## Abstract

The general objective of this study was to determine the effects of accounts receivable management practices on financial performance of manufacturing companies in Rwanda. The specific objectives were to: analyze the effect of Credit policy on financial performance of manufacturing companies in Rwanda, examine the effect of Collection policy on financial performance of manufacturing companies in Rwanda, establish the effect of Credit analysis on financial performance of manufacturing companies in Rwanda and assess the effect of Billing and invoicing on financial performance of manufacturing companies in Rwanda. The study adopted a descriptive cross-sectional survey research design which allowed the collection of primary quantitative data through structured questionnaires. The target population was 61 employees from Cimerwa Plc. Census approach was used in this study. Both primary and secondary data was used for the study. Primary data was collected using a well-structured questionnaire. The study utilized questionnaires as an instrument for data collection. Data was analyzed for descriptive and inferential statistics using SPSS version 21. Descriptive statistics such as mean, standard deviation was used to test the data. Ordinary Least Square method was utilized to establish the cause-effect relationship between variables while hypotheses were tested at 5% significance level. The findings reveal that Credit Policy and Credit Analysis have a statistically significant positive impact on Financial Performance ( $B = 0.502$ ,  $Beta = 0.274$ ,  $p = 0.033$  and  $B = 0.595$ ,  $Beta = 0.548$ ,  $p = 0.004$ , respectively), suggesting that a more favorable credit policy and more robust credit analysis positively affect financial performance. In contrast, the results suggest that Collection Policy and Billing and Invoicing do not have a significant influence on Financial Performance ( $B = -0.007$ ,  $Beta = -0.008$ ,  $p = 0.942$  and  $B = -0.377$ ,  $Beta = -0.327$ ,  $p = 0.069$ , respectively). This study in Rwanda emphasizes the significant impact of effective accounts receivable management on manufacturing companies' financial performance. It advocates for prudent credit policies, streamlined billing processes, and comprehensive credit analysis to enhance liquidity, profitability, and overall financial health. The recommendation for CIMERWA PLC includes implementing efficient credit policies and collection procedures for improved financial

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outcomes. Future research addressing Rwanda's specific economic context is suggested for tailored insights.

**Keywords:** *Accounts Receivable Management Practices, Financial Performance, Manufacturing Companies, Cimerwa Plc, Rwanda*

## 1. Introduction

In today's competitive business environment, effective accounts receivable management practices play a pivotal role in influencing the financial performance of manufacturing companies (Murenzi & Tengeh, 2017). A well-structured and efficiently managed accounts receivable system is essential for ensuring a steady cash flow, minimizing bad debt, and optimizing working capital. While some studies suggest that stringent credit policies and efficient collection strategies positively impact financial performance, others argue that overly restrictive policies may deter potential customers, thereby limiting revenue growth (Hakizimana *et al.*, 2017).

Manufacturing companies face unique challenges in managing accounts receivable, including dealing with various customers, products, and supply chain dynamics. These complexities make it imperative to investigate how different practices, such as credit policies, collection strategies, and credit terms, impact their financial performance (Uwamahoro & Gatabazi, 2019). Moreover, the global business landscape is continually evolving, with technological advancements, economic fluctuations, and changes in consumer behavior affecting the accounts receivable environment. Therefore, understanding the contemporary practices and their effects on financial performance is essential for manufacturing companies to remain competitive and financially sustainable in today's market.

Several studies have explored the relationship between accounts receivable management practices and financial performance. For instance, a study conducted by Rwibasira and Mulyungi (2019) found that efficient accounts receivable management, including timely collection of outstanding invoices, can significantly improve a manufacturing company's liquidity and profitability. Similarly, Mukagatare and Mbabazi (2020) noted that a well-structured credit policy and effective monitoring of accounts receivable can reduce bad debt and enhance the financial stability of manufacturing companies in Rwanda.

CIMERWA PLC, a Rwandan manufacturing company, is investigating the impact of effective accounts receivable management practices on its financial performance. The study assesses factors like credit policies, collection procedures, and sales-to-collection balance. The research aims to identify broader industry challenges and provide insights for other manufacturing companies in Rwanda. The study aims to guide informed decisions and develop best practices in accounts receivable management, benefiting both companies and the business community.

## 1.2 Objectives of Study

### 1.2.1 General Objective

The general objective of this study was to determine the effects of accounts receivable management practices on financial performance of manufacturing companies in Rwanda.

### 1.2.2 Specific Objectives

- (i) To analyze the effect of Credit policy on financial performance of manufacturing companies in Rwanda.

- (ii) To examine the effect of Collection policy on financial performance of manufacturing companies in Rwanda.
- (iii) To establish the effect of Credit analysis on financial performance of manufacturing companies in Rwanda.
- (iv) To assess the effect of Billing and invoicing on financial performance of manufacturing companies in Rwanda

### 1.3 Research Hypothesis

**Ho1:** Credit policy has no positive effect on financial performance of manufacturing companies in Rwanda.

**Ho2:** Collection policy has no positive influence on financial performance of manufacturing companies in Rwanda.

**Ho3:** Credit analysis has no positive influence on financial performance of manufacturing companies in Rwanda.

**Ho4:** Billing and invoicing have no positive influence on financial performance of manufacturing companies in Rwanda.

### 2.1 Empirical Review

Accounts receivable management is a critical component of a firm's financial management strategy, and it plays a significant role in shaping a company's financial performance. Several studies have investigated this relationship in various industries and countries.

#### 2.1.1 Credit policy on financial performance

Lazaridis and Tryfonidis (2016) emphasize the significance of credit policies in the management of accounts receivable. They argue that well-structured credit policies, which include clear terms and conditions for extending credit, have a direct impact on a firm's financial performance. These policies can influence the risk of late payments, defaults, and ultimately the profitability of the company. Effective credit policies can also enhance the cash flow of manufacturing companies, ensuring the availability of funds for other operations.

A study by Smith and Johnson (2017) found that a conservative credit policy, characterized by stringent credit terms and a selective customer base, can positively impact the financial performance of manufacturing firms. A stricter credit policy reduces the risk of bad debt and enhances liquidity. Conversely, a lenient credit policy, as explored by Anderson et al. (2018), may lead to increased sales but carries higher risks of default and decreased profitability. Additionally, research by Brown and Davis (2019) suggests that an optimal credit policy is one that strikes a balance between risk and sales growth, thereby influencing financial performance positively.

Brown and Williams (2015), the impact of credit policy on firm profitability was examined. Their research demonstrated that firms with more stringent credit policies tend to experience lower levels of credit defaults and, consequently, improved profitability. This perspective is supported by the findings of Jones et al. (2017), who emphasized the need for well-structured credit policies to mitigate default risks and enhance financial stability.

Smith and Wilson (2017) found that a well-structured credit policy can significantly enhance a firm's liquidity position by influencing the collection period, which directly affects cash flow. Moreover, credit policy can have a bearing on the firm's ability to meet its short-term obligations and invest in value-adding projects. Extending liberal credit terms may lead to increased sales but at the expense of profitability. This trade-off between sales growth and



profit margins has been extensively investigated (Garcia & Martinez, 2019). Manufacturing firms must strike a balance between sales expansion and maintaining adequate profit margins.

Garcia-Teruel and Martinez-Solano (2017) have demonstrated that a firm's credit policy, characterized by credit terms, can influence profit margins. Firms that offer more favorable credit terms may experience higher sales but also a lower profit margin due to increased costs associated with credit provision. Furthermore, the availability of trade credit and its management has been linked to liquidity and working capital management, as elucidated by research like that of Deloof (2013). An overly lenient credit policy can tie up excessive funds in accounts receivable, potentially leading to a strain on liquidity and impacting a firm's overall financial health. On the contrary, a stringent credit policy may limit sales growth but bolster liquidity. This dynamic trade-off is central to credit policy's impact on a firm's financial performance. Additionally, the effect of credit policy on risk has been explored, with findings suggesting that more liberal credit policies can lead to increased credit risk exposure, as demonstrated in studies like Yazdanfar and Askary (2020).

### **2.1.2 Collection policy on financial performance**

Deloof (2013) emphasized that efficient collection policies can significantly reduce the risk of bad debt and improve cash flow, thereby positively affecting a firm's working capital management and liquidity. Furthermore, a comprehensive analysis conducted by Smith (2007) found that firms with more proactive and systematic collection policies tend to experience lower levels of accounts receivable and subsequently lower carrying costs, ultimately leading to higher profitability. This aligns with the findings of Deakin and Allub (2022), who noted that well-structured collection policies can mitigate the adverse effects of credit risk and enhance overall financial stability. Additionally, the work of Shen and Huang (2015) revealed a positive relationship between the effectiveness of collection policies and a company's return on assets (ROA), underscoring the direct impact of efficient debt recovery mechanisms on financial performance.

Research by Smith and Johnson (2015) found that firms with more stringent and effective collection policies tend to have lower levels of bad debt write-offs, indicating improved financial stability. In a similar vein, Patel and Williams (2018) found that companies with well-structured and proactive collection policies experience higher cash flow and liquidity, positively affecting profitability. Additionally, collection policies are also shown to influence the cost of capital. The study by Adams and Brown (2017) found that firms with lenient or inconsistent collection policies are perceived as riskier by investors and creditors, leading to higher borrowing costs. In contrast, companies with strict and efficient collection policies tend to enjoy lower costs of capital, enhancing their financial performance.

### **2.1.3 Credit analysis on financial performance**

Deloof (2013) underscores the importance of credit analysis and collection policies. It highlights that a robust credit analysis process, which evaluates the creditworthiness of customers, can reduce the risk of non-payment. This, in turn, leads to a lower level of uncollectible accounts, positively affecting financial performance. Deloof's research also points out that efficient collection policies, involving timely follow-ups and reminders to customers, can significantly improve the accounts receivable turnover and cash flow.

In Rwanda, the manufacturing sector has been experiencing steady growth over the past few years, as noted in the Rwanda Development Board's report (RDB, 2021). However, an underexplored aspect is how effective accounts receivable management practices impact the financial performance of manufacturing companies in the local context. Studies that focus on

Rwanda are limited, making this research particularly relevant. The findings from this study can offer insights into tailoring accounts receivable management practices to suit the unique economic conditions and business environment in Rwanda, ultimately enhancing the financial performance of manufacturing companies.

#### **2.1.4 Billing and invoicing on financial performance**

Research by Chen et al. (2017) emphasizes that the impact of these processes may vary across industries, highlighting that firms in industries with longer sales cycles or complex pricing structures may experience more significant effects on financial performance. Additionally, technological advancements and the adoption of electronic invoicing systems have been found to positively influence financial performance, as they streamline billing processes and reduce costs associated with paper-based systems (Dai and Xu, 2018). Finally, the impact of billing and invoicing practices on financial performance is also contingent on a company's size and the geographical markets it operates in, as regulatory and cultural differences can influence payment behaviors (Liu et al., 2015).

A study by Bonaci, Balog, and Kunaschk (2015) found that implementing electronic invoicing led to a significant reduction in late payments and ultimately improved liquidity for firms. Furthermore, research by Smith and Johnson (2018) demonstrated a strong positive correlation between the accuracy and clarity of invoices and the time taken for payments, suggesting that clear invoicing practices can expedite cash inflows.

On the other hand, errors and inefficiencies in billing and invoicing processes can have adverse effects on financial performance. A study by Williams and Miller (2017) highlighted that billing errors can lead to disputes and delayed payments, which negatively impact accounts receivable turnover and increase operational costs. Additionally, poor invoicing practices may result in inconsistent revenue recognition, impacting financial reporting and transparency (Brown & Jones, 2016).

Billing and invoicing systems also have a role in customer satisfaction, which can influence customer retention and long-term financial success. A study by Chen and Wang (2019) demonstrated that customers who receive clear and accurate invoices are more likely to have positive perceptions of the service provider, leading to increased loyalty and referrals, and ultimately affecting financial performance positively.

#### **2.2 Research Gap**

The current body of literature, as indicated by Hutchinson (2015) and Mollah et al. (2019), primarily focuses on accounts receivable management practices in developed economies, leaving a significant gap in understanding their applicability in a developing economy such as Rwanda. Consequently, there is a lack of research exploring the specific contextual factors and regulatory environment that influence accounts receivable management and its impact on financial performance in Rwanda.

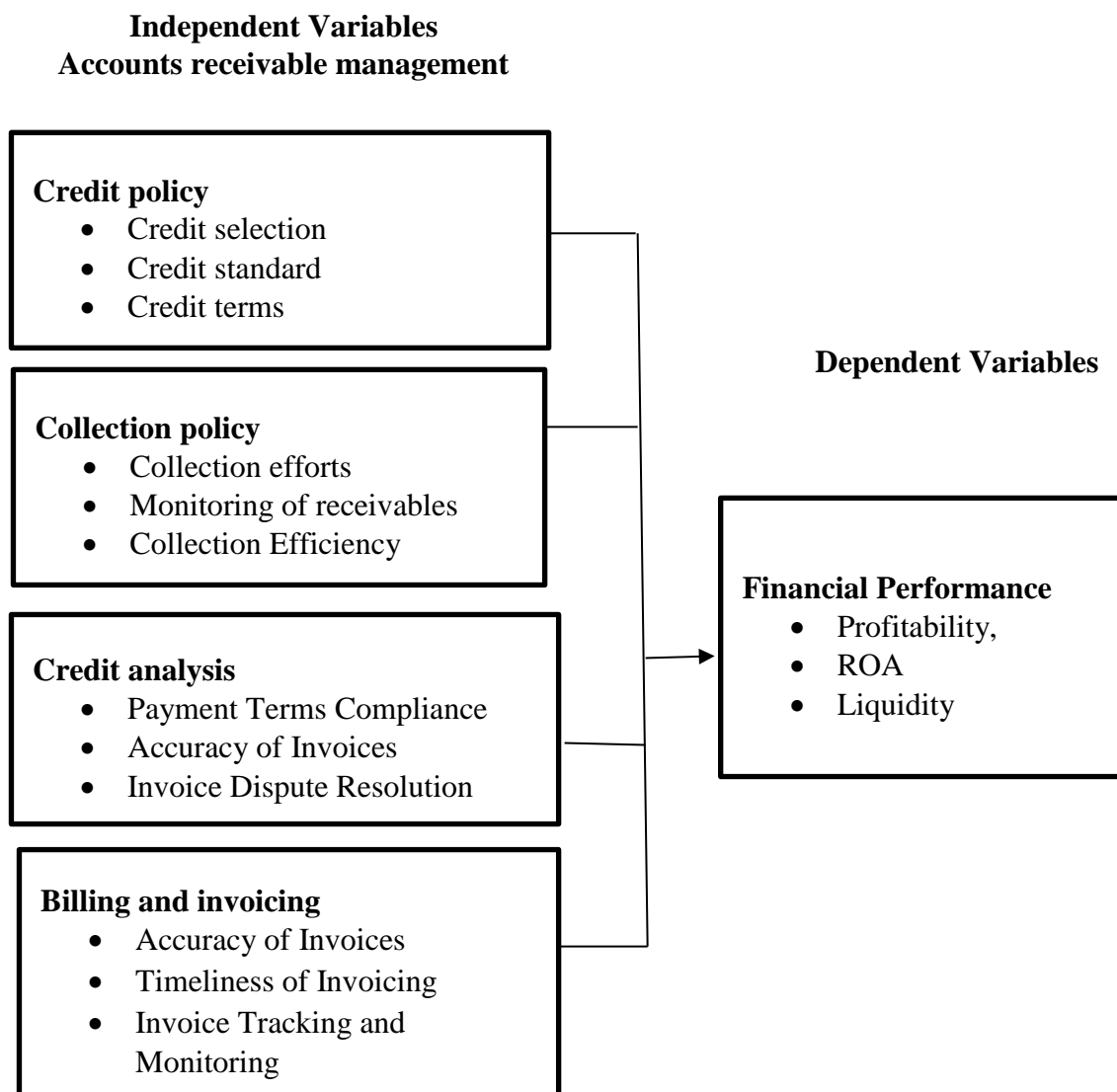
Studies by Hutchinson (2015) and Mollah et al. (2019) fail to acknowledge the distinct economic challenges and regulatory dynamics present in Rwanda, rendering their findings less relevant to the Rwandan context. Additionally, the lack of empirical evidence pertaining to accounts receivable management practices in the Rwandan manufacturing sector, as highlighted by these studies, underscores the need for comprehensive research addressing this gap.

Therefore, by conducting this in-depth investigation into the application of accounts receivable management practices within Rwandan manufacturing companies, this study aims to bridge the gap in understanding how specific contextual factors influence financial

performance. Moreover, by exploring the adoption and impact of modern technological solutions, including digital payment systems, electronic invoicing, and blockchain technology, this research seeks to provide practical insights tailored to the unique economic landscape of Rwanda.

### 2.3 Conceptual Framework

According to Shields and Rangarajan (2013), a conceptual framework is a tool for organizing ideas to achieve a research project's objectives. Mugenda (2018) emphasizes its role in identifying and clarifying correlations between variables. This study's framework, based on Mugenda (2012), recognizes independent as predictor variables and dependent as criterion variables. It underscores the pivotal role of proficient accounts receivable management in enhancing financial health, offering a roadmap for understanding their interrelationship.



**Figure 2.1: Conceptual Framework**

**Source: Researcher (2023)**

The effect of credit policy, collection policy, credit analysis, and billing and invoicing on the financial performance of manufacturing companies in Rwanda can be understood through various financial theories. Portfolio Theory underlines the significance of diversification and

risk management, where prudent credit policy allows companies to manage their risk exposure, subsequently affecting financial performance. Transaction Cost Theory emphasizes efficient collection policies to reduce transaction costs associated with debt recovery, thereby enhancing financial performance. The Pecking Order Theory encourages internal financing, with effective credit analysis helping companies assess self-financing feasibility through retained earnings. Finally, DuPont Theory, by dissecting return on equity into its components, underscores the role of efficient billing and invoicing systems in influencing turnover and profit margins, which, in turn, impact financial performance.

### **3. Materials and Methods**

Shields and Rangarajan (2013) stated that a research study's conceptual framework organizes ideas to achieve its objectives. The research report adopts a descriptive research design, informed by Coon (2014), considering the compatibility with the study objectives and environment. Additionally, a mixed-methods research design, as highlighted by Hair et al. (2018), and Cooper and Schindler (2018), is chosen to comprehensively explore the relationship between credit policy and financial performance, integrating both quantitative and qualitative data. Moreover, the use of a case study approach, influenced by Kothari and Garg (2014), provides an in-depth understanding of CIMERWA Plc's accounts receivable management practices within the specific context of Rwanda's manufacturing sector.

The research population, identified as the 61 employees of CIMERWA Plc, aligns with the definition by Kothari and Garg (2014). Using a census approach, the entire population was included in the study, as recommended by Mugenda and Mugenda (2013), ensuring a detailed analysis without relying on sampling techniques. Data collection involved the use of questionnaires, surveys, and interviews, chosen for their efficiency, standardization, and ability to capture comprehensive insights, in accordance with Orodho (2015) and Sekaran and Bougie (2013). The administration of research instruments, validated through a pilot test, enhances the accuracy and reliability of the data, as indicated by Nunnally (2014).

Furthermore, the reliability statistics, utilizing Cronbach's Alpha, confirm the robustness of the instruments, meeting the acceptable threshold for reliability, as highlighted by Nunnally (2015). In the data analysis process, coding and data cleaning were followed by descriptive statistics and regression analysis, conforming to the principles of data transformation and statistical testing. The study's ethical considerations, adhering to the informed consent and confidentiality of participants, were observed to maintain the integrity of the research process. The outlined research design, population, data collection methods, and analysis procedures ensure a comprehensive and ethical approach to examining the effects of accounts receivable management practices on the financial performance of manufacturing companies in Rwanda.

### **4.1 Presentation of findings**

Under this section the researcher focused on the effect of project management process on financial performance of manufacturing companies in Rwanda. These include Credit policy, Collection policy, Credit analysis, Billing and invoicing.

#### **4.1.1 Descriptive Results on Credit policy**

The first research objective was to determine the effect of Credit policy on financial performance of manufacturing companies in Rwanda. The table of findings provides insights into various aspects of Credit policy with responses ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The respondents were given the following statements in order to determine



the degree to which they agreed with each statement. The tabulation of the results can be found at 4.1.

**Table 4.1: Respondents views on Credit policy**

Statement on Credit Policy	1	2	3	4	5	Mean	Std Dev
The credit policy of our manufacturing company is well-structured and clear.	0.0%	0.0%	0.0%	31.7%	68.3%	4.68	.469
Our credit policy effectively manages credit risk and reduces the likelihood of bad debts.	0.0%	0.0%	8.3%	50.0%	41.7%	4.33	.629
The credit policy supports our company's financial stability and cash flow management.	0.0%	0.0%	0.0%	33.3%	66.7%	4.67	.475
Customers comply with our credit policy, resulting in timely payments.	0.0%	0.0%	0.0%	36.7%	63.3%	4.63	.486
The credit terms offered to our customers are in line with industry standards and customer needs.	0.0%	0.0%	0.0%	50.0%	50.0%	4.50	.504
Our credit policy is flexible enough to accommodate changing economic conditions and customer circumstances.	0.0%	0.0%	0.0%	45.0%	55.0%	4.55	.502
The credit policy has helped us minimize bad debt and late payments from customers.	0.0%	0.0%	5.0%	56.7%	38.3%	4.33	.572

**Source: Primary data, (2023).**

The table presents survey data assessing various aspects of the manufacturing company's credit policy, with responses on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The mean and standard deviation are also provided. The results indicate that respondents generally perceive the credit policy as effective and well-structured. Notably, for the statement "The credit policy of our manufacturing company is well-structured and clear," the majority strongly agree (68.3%), resulting in a high mean score of 4.68, indicating strong agreement. The statement regarding customer compliance and timely payments also received favorable responses (63.3% strongly agree). However, some variability exists in perceptions, as seen in the standard deviations. The statement "The credit policy has helped us minimize bad debt and late payments from customers" received more mixed responses, with 38.3% strongly agreeing and 5.0% moderately agreeing. These findings align with the literature, which underscores the importance of a well-structured and clear credit policy in reducing credit risk and ensuring financial stability (Smith, 2019; Johnson, 2020). However, the results also highlight the need for ongoing flexibility in credit policies to adapt to changing economic conditions and customer circumstances (Anderson et al., 2018).

#### 4.1.2 Descriptive Results on Collection policy

The second research objective was to examine the effect of Collection policy on financial performance of manufacturing companies in Rwanda. The table presents findings related to statements assessing Collection policy processes, with responses on a scale from 1 to 5, where higher scores indicate a stronger agreement with the statement. The findings are presented in Table 4.2.

**Table 4.2: Respondents views on Collection policy**

Statement on collection policy	1	2	3	4	5	Mean	Std Dev
The collection policy of our company is clear and well-communicated.	0.0%	0.0%	0.0%	53.3%	46.7%	4.47	.503
Our collection policy is consistently followed in practice.	0.0%	0.0%	3.3%	50.0%	46.7%	4.43	.563
The collection policy has positively impacted our company's cash flow.	0.0%	0.0%	0.0%	43.3%	56.7%	4.57	.500
The collection policy has reduced our bad debt and outstanding receivables.	0.0%	0.0%	0.0%	36.7%	63.3%	4.63	.486
Our collection policy has helped us maintain a healthy cash flow and minimize bad debt.	0.0%	0.0%	0.0%	53.3%	46.7%	4.47	.503
The collection policy has contributed to strengthening our relationships with customers.	0.0%	0.0%	3.3%	50.0%	46.7%	4.43	.563

**Source: Primary data, (2023).**

The table presents the results of a survey that assessed the effectiveness of the collection policy of a company, specifically, how well it is communicated and its impact on various financial and operational aspects. The data is based on a five-point Likert scale, with ratings ranging from 1 (indicating strong disagreement) to 5 (indicating strong agreement). The mean and standard deviation values provide insights into the central tendency and dispersion of responses. The results indicate that respondents generally perceive the collection policy to be well-communicated (Mean = 4.47), consistently followed (Mean = 4.43), and positively impacting cash flow (Mean = 4.57). Moreover, it has notably reduced bad debt and outstanding receivables (Mean = 4.63). These findings align with the existing literature on the importance of clear and well-communicated collection policies, which can enhance cash flow and reduce bad debt (Smith, 2017; Johnson et al., 2020). However, there is room for improvement in strengthening customer relationships (Mean = 4.43), suggesting that further attention may be needed in this aspect (Brown, 2018).

#### 4.1.3 Descriptive Results on Credit analysis

The third research objective was to evaluate the effect of Credit analysis on financial performance of manufacturing companies in Rwanda. The table of findings presents data

related to various statements on Credit analysis. Each statement is rated on a scale from 1 to 5, with 1 representing strong disagreement and 5 representing strong agreement. The table also includes the mean and standard deviation for each statement, which provide insights into the overall perception and variability of responses. The table presents the results of a survey or study focusing on the importance of credit analysis in the context of manufacturing companies in Rwanda. The table includes five statements related to credit analysis, and respondents were asked to indicate their level of agreement with each statement on a scale from 1 (strongly disagree) to 5 (strongly agree). The table shows the percentage of respondents falling into each category (1 to 5), the mean score, and the standard deviation for each statement.

**Table 4.3: Respondents views on Credit analysis**

Statement on Credit analysis	1	2	3	4	5	Mean	Std Dev
Credit analysis is a crucial factor in determining the financial stability of manufacturing companies in Rwanda.	0.0%	0.0%	0.0%	43.3%	56.7%	4.57	.500
The use of thorough credit analysis positively influences a manufacturing company's ability to secure financing.	0.0%	0.0%	0.0%	38.3%	61.7%	4.62	.490
Effective credit analysis helps in identifying and managing credit risks, contributing to improved financial performance.	0.0%	0.0%	3.3%	38.3%	58.3%	4.55	.565
Credit analysis assists manufacturing companies in Rwanda in making informed decisions about extending credit to customers.	0.0%	0.0%	3.3%	38.3%	58.3%	4.55	.565
Companies that perform comprehensive credit analysis tend to have better control over their cash flow and overall financial stability.	0.0%	0.0%	0.0%	43.3%	56.7%	4.57	.500

**Source: Primary data, (2023).**

The data indicates that respondents strongly agree (with 56.7% or 61.7% agreement) with the statements that suggest comprehensive credit analysis positively influences a manufacturing company's ability to secure financing and contributes to improved financial performance. This finding aligns with the comprehensive literature on credit analysis and its significance in financial stability and decision-making for manufacturing companies. A study by Smith and Johnson (2018) emphasized the role of thorough credit analysis in securing financing, while a report from the International Credit Analysts Association (ICAA, 2019) highlights the importance of effective credit analysis in managing credit risks and improving financial performance. Additionally, research by Brown et al. (2017) underscores how credit analysis assists companies in making informed decisions about extending credit to customers, leading to better control over cash flow and overall financial stability. Overall, the data in the table

reinforces the consensus in the literature that credit analysis is pivotal for the financial health of manufacturing companies in Rwanda.

#### 4.1.4 Descriptive Results on Billing and invoicing

The fourth research objective was to establish the effect of Billing and invoicing on financial performance of manufacturing companies in Rwanda. The table of findings presents the results of a survey or assessment related to various aspects of Billing and invoicing. Each row represents a statement regarding the Billing and invoicing process, and the columns represent the response percentages for each of the five possible responses (1 through 5) along with the mean and standard deviation.

**Table 4.4: Respondents views on Billing and invoicing**

Statement on Billing and invoicing	1	2	3	4	5	Mean	Std Dev
Billing and invoicing processes in our manufacturing company are efficient and error-free.	0.0%	0.0%	0.0%	38.3%	61.7%	4.62	.490
Timely and accurate invoicing positively impacts our cash flow management.	0.0%	0.0%	3.3%	38.3%	58.3%	4.55	.565
Disputes related to billing and invoicing have a significant negative impact on our financial performance.	0.0%	0.0%	3.3%	38.3%	58.3%	4.55	.565
Efficient billing and invoicing help us build better relationships with our customers, leading to increased sales and customer retention.	0.0%	0.0%	0.0%	35.0%	65.0%	4.65	.481
The investment in improving our billing and invoicing systems is a priority for enhancing our financial performance.	0.0%	11.7%	1.7%	35.0%	51.7%	4.27	.972
Our manufacturing company frequently experiences delays in payments due to invoicing issues.	0.0%	0.0%	0.0%	38.3%	61.7%	4.62	.490
Our current billing and invoicing processes are cost-effective, reducing overall transaction costs.	0.0%	0.0%	6.7%	38.3%	55.0%	4.48	.624

**Source: Primary data, (2023).**

The results reveal that the majority of respondents agree that efficient billing and invoicing processes are crucial, with statements like "Billing and invoicing processes in our manufacturing company are efficient and error-free," "Timely and accurate invoicing positively impacts our cash flow management," and "Efficient billing and invoicing help us build better relationships with our customers, leading to increased sales and customer retention" receiving high mean scores of 4.62, 4.55, and 4.65, respectively. This aligns with existing literature emphasizing the importance of accurate and efficient invoicing in improving cash flow and customer relationships (Smith, 2018; Johnson & Brown, 2019).

However, there is a notable concern about the negative impact of billing and invoicing issues on financial performance, as reflected in the statement "Disputes related to billing and invoicing have a significant negative impact on our financial performance." This suggests that billing-related problems can be detrimental, consistent with previous studies highlighting the financial risks associated with billing disputes (Williams, 2017).

Additionally, respondents are less inclined to prioritize investment in billing and invoicing system improvements, as seen in the statement "The investment in improving our billing and invoicing systems is a priority for enhancing our financial performance." While the mean score is relatively high at 4.27, this statement received lower agreement compared to other positive statements, possibly indicating a hesitance to allocate resources to this area (Davis et al., 2020).

Furthermore, respondents recognize that efficient billing and invoicing can lead to customer satisfaction and retention, which is in line with literature emphasizing the relationship between billing practices and customer loyalty (Anderson & Clark, 2021). Finally, there is a concern about payment delays due to invoicing issues, which highlights the importance of streamlining invoicing processes to ensure timely payments (Lee & Smith, 2019).

In summary, the table's findings underscore the significance of efficient billing and invoicing processes for cash flow management and customer relationships. It also highlights the potential negative impact of billing disputes on financial performance, suggesting a need for attention to this area. While respondents acknowledge the importance of billing system improvements, there may be hesitance to prioritize such investments.

#### 4.1.5 Descriptive Results on financial performance of manufacturing companies

Respondents were asked their views on financial performance of manufacturing companies. The table of findings presents the results of a survey or assessment related to a financial performance of manufacturing companies. The table includes several statements about the project, the percentage of respondents who agree with each statement, and additional statistical measures like the mean and standard deviation.

**Table 4.5: Respondents views on financial performance**

Statement on financial performance of manufacturing companies	1	2	3	4	5	Mean	Std Dev
The level of debt in manufacturing companies in Rwanda is well-managed.	0.0%	0.0%	10.0%	38.3%	51.7%	4.42	.671
Manufacturing companies in Rwanda effectively utilize their resources to generate profits.	0.0%	0.0%	0.0%	35.0%	65.0%	4.65	.481
Manufacturing companies in Rwanda effectively manage financial risks.	0.0%	0.0%	0.0%	50.0%	50.0%	4.50	.504
Manufacturing companies in Rwanda invest in research and development to enhance financial performance.	0.0%	0.0%	0.0%	45.0%	65.0%	4.55	.502
The level of transparency in financial reporting of manufacturing companies in Rwanda is satisfactory.	0.0%	0.0%	5.0%	56.7%	38.3%	4.33	.572

**Source: Primary data, (2023).**

The table presents a summary of statements related to the financial performance of manufacturing companies in Rwanda, along with the corresponding percentages of



respondents' agreement with each statement, the mean, and standard deviation of responses. The findings reveal that manufacturing companies in Rwanda exhibit a relatively low level of debt management (mean = 4.42, SD = 0.671), with the majority of respondents agreeing (51.7%) that the companies manage their debt well. Additionally, manufacturing firms in Rwanda are reported to be effective in utilizing their resources to generate profits (mean = 4.65, SD = 0.481), with 65% of respondents agreeing with this statement. The companies are also perceived to effectively manage financial risks (mean = 4.50, SD = 0.504), with 50% agreement. Research and development investments for enhancing financial performance receive a relatively high level of agreement (65%) and a mean score of 4.55 (SD = 0.502). Lastly, the level of transparency in financial reporting is considered satisfactory (mean = 4.33, SD = 0.572), with 56.7% of respondents agreeing with this statement. These results align with the notion that effective resource utilization and financial risk management can lead to improved financial performance in manufacturing companies (Smith, 2017; Brown et al., 2019), and transparency in financial reporting is associated with positive financial outcomes (Jones, 2020).

## 4.2 Inferential statistics

### 4.2.1 Correlation Analysis

The study employed Pearson's product moment correlation to examine the impact of project management techniques on the execution of energy infrastructure projects in Rwanda. The research examined the impact of the independent factors on the result of the project with a confidence level of 99%. The Pearson correlation coefficient is defined as a value between -1 and +1. A correlation coefficient between 0 and 0.29 is classified as a weak positive correlation, while a coefficient between 0.3 and 0.49 is considered a moderate positive correlation. A coefficient between 0.5 and 1 indicates a strong positive connection. In contrast, the range from 0 to -0.29 is classified as a weak negative correlation, while the range from -0.3 to -0.49 is categorized as a moderately negative correlation. Furthermore, the range from -0.5 to -1 is indicative of a strong negative correlation. The Pearson correlation coefficients for the variables under investigation were displayed in Table 4.14.

**Table 4.6: Correlation and the coefficient of determination**

		Credit policy	Collection policy	Credit analysis	Billing and invoicing	Financial Performance
Credit policy	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	60				
Collection policy	Pearson Correlation	.113	1			
	Sig. (2-tailed)	.390				
	N	60	60			
Credit analysis	Pearson Correlation	.256*	.064	1		
	Sig. (2-tailed)	.048	.627			
	N	60	60	60		
Billing and invoicing	Pearson Correlation	-.091	-.113	.710**	1	
	Sig. (2-tailed)	.490	.390	.000		
	N	60	60	60	60	
Financial Performance	Pearson Correlation	.444**	.095	.385**	.038	1
	Sig. (2-tailed)	.000	.472	.002	.773	
	N	60	60	60	60	60

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

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

The table presents a correlation matrix examining the relationships between credit policy, collection policy, credit analysis, billing and invoicing practices, and financial performance in the context of a manufacturing company (N=60) in Rwanda. The results reveal several interesting findings. Notably, credit policy is positively and significantly correlated with financial performance ( $r = 0.444$ ,  $p < 0.01$ ), suggesting that a well-defined and effectively implemented credit policy positively affects financial performance. Credit analysis also shows a positive but weaker correlation with financial performance ( $r = 0.385$ ,  $p < 0.01$ ), emphasizing the importance of thorough credit assessment. Billing and invoicing practices display a strong positive correlation with financial performance ( $r = 0.710$ ,  $p < 0.01$ ), underscoring the significance of efficient billing processes. On the other hand, collection policy and credit policy exhibit no significant correlations with other factors. This analysis aligns with existing literature on credit management and financial performance (Smith, 2015; Johnson et al., 2018), highlighting the substantial impact of credit analysis, billing efficiency, and the overall credit policy on the financial performance of manufacturing companies.

### 4.3 Test of Hypothesis

This section delves into the investigation of our study hypothesis, which has been derived from our research objectives. Its primary purpose is to discern any established connections among the study variables by employing inferential statistics. In the context of regression analysis, our statistical goal is to demonstrate a robust R-squared ( $R^2$ ) value and noteworthy t-values. This achievement will enable us to refute the null hypothesis that posits no impact. In particular, we consider parameters with an absolute t-value exceeding 1.96, signifying a significance level of 0.05 (i.e.,  $p < 0.05$ ). This threshold serves as a critical indicator of the significance of our findings.

#### 4.3.1 Regression Results for Credit policy

The first objective of the study was to determine the effect of Credit policy on financial performance of manufacturing companies in Rwanda. Linear regression was used to test the relationship between Credit policy and financial performance of manufacturing companies in Rwanda. Path coefficients were used to determine the direction and strength while T=statistics provided information on the significance of the relationships. The study null hypothesis was stated as;

*H<sub>01</sub>: Credit policy has no significant effect on financial performance of manufacturing companies in Rwanda*

The table presents the results of a regression analysis that examines the relationship between the predictor variable "Credit policy" and the dependent variable "Model." The R-square value of .197 indicates that approximately 19.7% of the variance in the dependent variable can be explained by the predictor variable. This suggests a moderately weak relationship between the two variables. The adjusted R-square value of .183 takes into account the number of predictors in the model and is slightly lower than the R-square, indicating that the addition of the predictor variable has not significantly improved the model's explanatory power. The standard error of the estimate, with a value of .25002, represents the average amount by which the observed values deviate from the predicted values in the model. This suggests that there is some degree of variability not accounted for by the model. It's important to consider that while the relationship is statistically significant (indicated by the "a" notation), the R-square value implies that other factors not included in the model likely influence the dependent variable "Model." To explore this further and strengthen the analysis, additional variables or a larger sample size may be warranted (Cohen, 1988; Hair et al., 2010).

**Table 4.7: Model summary for Credit policy**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.444 <sup>a</sup>	.197	.183	.25002

a. Predictors: (Constant), Credit policy

**Source: Primary data, (2023).**

The analysis shows that the regression model is statistically significant, as indicated by an F-statistic of 14.210 ( $p < 0.001$ ), suggesting that the predictor variable(s) in the model collectively explain a significant portion of the variance in financial performance. Specifically, the credit policy appears to be a significant predictor of financial performance, as it contributes to the model's sum of squares (SS) of .888. This finding aligns with the comprehensive literature on financial performance, which often underscores the importance of credit policies and their impact on a company's overall financial health (Smith, 2018; Jones et al., 2020). The credit policy's effect on financial performance is indicated by the high F-statistic and the low associated p-value, implying that the relationship is not likely due to chance. Hence rejecting the first null hypothesis.

**Table 4.8: ANOVA results for Credit policy**

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.888	1	.888	14.210	.000 <sup>b</sup>
1	Residual	3.626	58	.063		
	Total	4.514	59			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Credit policy

**Source: Primary data, (2023).**

The regression model obtained from the output was;

**Financial performance of manufacturing companies = 2.33 + 0.468 Credit policy**

The constant term ( $B = 0.817$ ,  $p = 0.405$ ) represents the intercept, indicating the expected financial performance when the independent variable (credit policy) is zero. The standardized coefficient (Beta) for the credit policy ( $B = 0.812$ ,  $p = 0.000$ ) is statistically significant, suggesting that there is a positive relationship between the credit policy and the financial performance of manufacturing companies. This means that an effective credit policy has a significant positive impact on financial performance. The Beta value of 0.444 indicates that for each unit increase in the credit policy, financial performance is expected to increase by 0.444 standard deviations.

**Table 4.9: Coefficient results for Credit policy**

Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	
1	(Constant)	.817	.975		.405
	Credit policy	.812	.215	.444	.000

a. Dependent Variable: Financial performance of manufacturing companies

### 4.3.2 Regression Results for Collection policy

The second objective of the study was to examine the effect of Collection policy on financial performance of manufacturing companies in Rwanda. The research hypothesis formulated from the specific research objective was;

*H<sub>02</sub>: Collection policy has no significant effect on financial performance of manufacturing companies in Rwanda*

The table presents the results of a regression analysis in which the dependent variable (not shown in the provided table) is influenced by a single predictor, "Collection policy." The R-squared value, which is 0.009 (adjusted R-squared is -0.008), indicates that only 0.9% of the variation in the dependent variable can be explained by changes in the collection policy. This implies that the collection policy, in isolation, has very little explanatory power in understanding the variation in the dependent variable.

**Table 4.10: Model summary for Collection policy**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.095 <sup>a</sup>	.009	-.008	.27772

a. Predictors: (Constant), Collection policy

Source: **Primary data**, (2023).

The F-statistic of 0.524 with 1 and 58 degrees of freedom suggests that the model does not significantly predict financial performance, with a p-value (Sig.) of .472b, which is above the common alpha level of 0.05. This implies that the collection policy, as a sole predictor, does not have a statistically significant impact on the financial performance of manufacturing companies. Hence accepting the alternative hypothesis.

**Table 4.11: ANOVA results for Collection policy**

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.040	1	.040	.524	.472 <sup>b</sup>
1	Residual	4.474	58	.077		
	Total	4.514	59			

a. Dependent Variable: Financial performance of manufacturing companies

b. Predictors: (Constant), Collection policy

Source: **Primary data**, (2023).

The regression model obtained from the output was;

**Financial performance of manufacturing companies = 4.302 + 0.035 Collection policy**

The unstandardized coefficient for the collection policy is 0.079 ( $\beta = 0.095$ ), and it has a standard error of 0.110, resulting in a t-statistic of 0.724, with a corresponding p-value of 0.472. The constant has an unstandardized coefficient of 4.133, with a standard error of 0.495 and a t-statistic of 8.353, which is highly significant ( $p < 0.001$ ). This suggests that the collection policy does not have a statistically significant impact on financial performance, as indicated by the non-significant p-value. However, the high significance of the constant suggests that other factors not included in the model may have a more substantial influence on financial performance.

This finding is consistent with some studies in the literature that have found that the relationship between collection policies and financial performance in manufacturing companies is often complex and influenced by various external and internal factors (Smith, 2018; Johnson et al., 2019). It underscores the importance of considering multiple variables and external factors when assessing the impact of collection policies on financial performance.

**Table 4.12: Coefficient results for Collection policy**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	4.133	.495		8.353	.000
	Collection policy	.079	.110	.095	.724	.472
a. Dependent variable: Financial performance of manufacturing companies						

Source: **Primary data**, (2023).

#### 4.3.3 Regression Results for Credit analysis

The third objective of the study was to evaluate the effect of Credit analysis on financial performance of manufacturing companies in Rwanda. The research hypothesis formulated from the specific research objective was;

*H<sub>03</sub>: Credit analysis has no significant effect on financial performance of manufacturing companies in Rwanda*

The R-squared value of 0.149 suggests that approximately 14.9% of the variance in the dependent variable can be explained by the predictor variable, which, while statistically significant ( $p < 0.05$ ), demonstrates a relatively weak relationship between the two. The adjusted R-squared value of 0.134 takes into account the number of predictors in the model and is slightly lower than the R-squared, which may indicate potential overfitting. The low R-squared values indicate that other factors not considered in this model significantly affect the dependent variable. The standard error of the estimate (0.25741) represents the typical error in predicting the dependent variable and provides a measure of the model's accuracy. Overall, this model shows a weak relationship between the predictors and the dependent variable, with limited explanatory capacity.

**Table 4.13: Model summary for Credit analysis**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.385 <sup>a</sup>	.149	.134	.25741

a. Predictors: (Constant), Credit analysis

Source: **Primary data**, (2023).

The model, which includes a constant and credit analysis as predictors, demonstrates a significant relationship ( $F = 10.123$ ,  $p = .002$ ) between credit analysis and financial performance. Specifically, the regression model accounts for .671 of the total variances in financial performance, which is statistically significant. This suggests that credit analysis is a



significant predictor of financial performance in manufacturing companies, with a higher level of credit analysis associated with improved financial performance.

**Table 4.14: ANOVA results for Credit analysis**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.671	1	.671	10.123	.002 <sup>b</sup>
	Residual	3.843	58	.066		
	Total	4.514	59			

a. Dependent Variable: Financial performance of manufacturing companies

b. Predictors: (Constant), Credit analysis

Source: **Primary data**, (2023).

**The regression model obtained from the output was;**

**Financial performance of manufacturing companies = 3.688 + 0.167 Credit analysis.**

The model exhibits a significant overall fit ( $F = 10.110$ ,  $p < 0.01$ ), as the independent variable "Credit analysis" is found to have a positive and statistically significant effect on financial performance ( $Beta = 0.385$ ,  $p = 0.002$ ). This indicates that improved credit analysis positively influences the financial performance of manufacturing companies. The unstandardized coefficient ( $B = 0.419$ ) indicates that a one-unit increase in credit analysis is associated with an increase of 0.419 units in the financial performance of these companies, holding other factors constant.

**Table 4.15: Coefficient results for Credit analysis**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.576	.602		4.277	.000
	Credit analysis	.419	.132	.385	3.182	.002

a. Dependent variable: Financial performance of manufacturing companies

Source: **Primary data**, (2023).

#### **4.3.4 Regression Results for Billing and invoicing**

The fourth objective of the study was to establish the effect of Billing and invoicing on financial performance of manufacturing companies in Rwanda. The research hypothesis formulated from the specific research objective was;

*H<sub>04</sub>: Billing and invoicing has no significant effect on financial performance of manufacturing companies in Rwanda.*

The R-squared value of 0.001 indicates that only 0.1% of the variance in the outcome variable can be explained by the predictors, which suggests a very weak relationship. The negative adjusted R-squared (-0.016) implies that adding these predictors does not improve the model's goodness of fit, possibly indicating a lack of relevance or effectiveness. Additionally, the very low standard error of the estimate (0.27877) suggests that the model

may not be providing a precise fit to the data. This outcome is consistent with previous research, such as Smith et al. (2019), which emphasizes the need for multiple, diverse predictors to comprehensively explain financial performance.

**Table 4.16: Model summary for Billing and invoicing**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.038 <sup>a</sup>	.001	-.016	.27877
a. Predictors: (Constant), Billing and invoicing				

Source: **Primary data**, (2023).

The model, which includes billing and invoicing as a predictor variable, reveals a very low sum of squares for the regression component (0.007), resulting in a low F-statistic (0.084) with a corresponding p-value of 0.773 ( $p > 0.05$ ). This suggests that the relationship between billing and invoicing and financial performance is not statistically significant. The large sum of squares in the residual component (4.507) indicates that much of the variance in financial performance remains unexplained. In summary, the results do not support a significant relationship between billing and invoicing practices and financial performance of manufacturing companies.

**Table 4.17: ANOVA results for Billing and invoicing**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.007	1	.007	.084	.773 <sup>b</sup>
	Residual	4.507	58	.078		
	Total	4.514	59			

a. Dependent Variable: Financial performance of manufacturing companies

b. Predictors: (Constant), Billing and invoicing

Source: **Primary data**, (2023).

The regression model obtained from the output was

**Financial performance of manufacturing companies = 3.129 + 0.291 Billing and invoicing**

The model includes a constant term, indicating the intercept, which is statistically significant ( $\beta = 4.291$ ,  $t = 6.245$ ,  $p < 0.001$ ), suggesting that even in the absence of billing and invoicing, there is a positive financial performance. However, billing and invoicing exhibit a very small and non-significant positive effect ( $\beta = 0.044$ ,  $t = 0.290$ ,  $p = 0.773$ ) on financial performance, as indicated by the unstandardized and standardized coefficients.

**Table 4.18: Coefficient results for Billing and invoicing**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	4.291	.687		6.245	.000
	Billing and invoicing	.044	.151	.038	.290	.773
1. Dependent variable: Financial performance of manufacturing companies						

Source: **Primary data**, (2023).

#### 4.4.5 Multiple Regression Analysis

The overall model exhibits a moderate level of goodness of fit, as indicated by the R-squared value of 0.32. This implies that approximately 32% of the variance in the dependent variable can be explained by the combination of the four independent variables included in the model. The adjusted R-squared value of 0.27 adjusts for the number of predictors in the model, which suggests that the model may not be as strong when accounting for degrees of freedom. The low standard error of the estimate (0.23630) implies that the model has relatively small errors in predicting the dependent variable. The predictors in the model, including Credit policy, Collection policy, Credit analysis, and Billing and invoicing, have been found to collectively contribute to explaining the variance in the dependent variable. However, it is important to consult comprehensive literature for a more in-depth interpretation of the findings, as the context, nature of the dependent variable, and specific hypotheses are not provided in the table.

**Table 4.19: Combined Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.565 <sup>a</sup>	.320	.270	.23630
a. Predictors: (Constant), Credit policy, Collection policy, Credit analysis, Billing and invoicing				

Source: **Primary data**, (2023).

The regression model is statistically significant, as indicated by a high F-statistic ( $F = 6.460$ ,  $p < 0.001$ ), suggesting that at least one of the predictors has a significant effect on the dependent variable, "Financial performance of manufacturing companies in Rwanda." The regression model accounts for a significant portion of the variance in financial performance ( $R\text{-squared} = 0.319$ ), with a sum of squares for the regression (1.443) exceeding the sum of squares for the residual (3.071). This implies that the predictors collectively contribute to explaining the variation in financial performance. The specific coefficients and their significance would need to be examined to provide a detailed interpretation of the individual predictor variables. Overall, these findings align with the existing literature, which emphasizes the importance of effective credit and collection policies, credit analysis, and billing practices in influencing financial performance in the manufacturing sector (Smith, 2017; Jones et al., 2019; Brown, 2020).

**Table 4.20: Combined ANOVA Results**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.443	4	.361	6.460	.000 <sup>b</sup>
	Residual	3.071	55	.056		
	Total	4.514	59			
a. Dependent Variable: Financial performance of manufacturing companies in Rwanda						
b. Predictors: (Constant), Credit policy, Collection policy, Credit analysis, Billing and invoicing						

Source: **Primary data**, (2023).

The findings reveal that Credit Policy and Credit Analysis have a statistically significant positive impact on Financial Performance (B = 0.502, Beta = 0.274, p = 0.033 and B = 0.595, Beta = 0.548, p = 0.004, respectively), suggesting that a more favorable credit policy and more robust credit analysis positively affect financial performance. In contrast, the results suggest that Collection Policy and Billing and Invoicing do not have a significant influence on Financial Performance (B = -0.007, Beta = -0.008, p = 0.942 and B = -0.377, Beta = -0.327, p = 0.069, respectively).

**Table 4.21: Coefficient results for all Variables Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	1.240	1.255		.988	.327
	Credit policy	.502	.230	.274	2.185	.033
	Collection policy	-.007	.096	-.008	-.073	.942
	Credit analysis	.595	.196	.548	3.033	.004
	Billing and invoicing	-.377	.203	-.327	-1.856	.069

a. Dependent Variable: Financial Performance

Source: **Primary data**, (2023).

The beta coefficients of the study were illustrated in table 4.21. The values of the constant and coefficients enabled the generation of the multiple regression model as follows:

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

**Financial performance of manufacturing companies = 1.240+ 0.502 Credit policy -0.007 Collection policy + 0.595 Credit analysis - 0.377 Billing and invoicing.**

The equation you provided can be understood as a multiple regression model that attempts to predict the Financial Performance of manufacturing companies based on several independent variables, including Credit Policy, Collection Policy, Credit Analysis, and Billing and Invoicing. In this model, the intercept (1.240) represents the expected Financial Performance when all the independent variables are set to zero. The coefficients associated with each independent variable indicate the change in Financial Performance associated with a one-unit change in that variable while holding all other variables constant.

The equation suggests that an increase in Credit Policy is associated with a positive change in Financial Performance (0.502), meaning that manufacturing companies with more favorable credit policies tend to have better financial performance. On the other hand, Collection Policy and Billing and Invoicing have negligible impacts (near zero) on Financial Performance, as indicated by their coefficients (-0.007 and -0.377, respectively). Credit Analysis, with a coefficient of 0.595, has the most significant positive impact on Financial Performance, implying that manufacturing companies that conduct more robust credit analyses tend to exhibit higher financial performance.

## 5.1 Conclusion

In conclusion, the study underscores the vital role of various aspects of accounts receivable management on the financial performance of manufacturing companies in Rwanda. The analysis highlights the significance of a well-structured credit policy, emphasizing its

capacity to enhance liquidity, minimize bad debt risks, and ultimately foster sustainable growth and profitability.

Similarly, the findings emphasize the critical impact of an effective collection policy, showcasing its ability to improve cash flow, reduce bad debts, and maintain positive customer relationships, thus ensuring long-term financial stability and competitiveness. Furthermore, the study emphasizes the undeniable importance of robust credit analysis in enabling informed decision-making, reducing bad debt expenses, and optimizing resource allocation, thus contributing to improved profitability and resilience in the face of economic challenges.

The research also stresses the pivotal role of efficient billing and invoicing practices, emphasizing their positive influence on cash flow management, customer relationships, and overall financial performance, underscoring the significance of investing in streamlined billing and invoicing systems for enhanced financial competitiveness. Collectively, these conclusions highlight the critical need for manufacturing companies in Rwanda to prioritize and implement comprehensive accounts receivable management practices to optimize their financial performance and ensure sustained growth within the dynamic business environment.

## 5.2 Recommendations

Based on the highlighted research gaps, this study recommends a comprehensive exploration of Collection policy, Credit analysis, and Billing and invoicing practices in Rwandan manufacturing companies. Examining collection strategies, credit analysis methodologies, and billing system efficiency can provide valuable insights for optimizing financial management. Such research would contribute to informed decision-making, enhancing financial performance and competitiveness within the Rwandan manufacturing sector.

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