

EFFECT OF AUDIT COMPETENCY ON THE PERFORMANCE OF MANUFACTURING COMPANIES IN RWANDA: CASE OF BRALIRWA PLC

Munyarukundo Seth¹; Dr. Eugenia Nkechi Irechukwu, (PhD) ²

1. Postgraduate Student (Finance) - Mount Kenya University - Kigali, Rwanda.

2. Senior Lecturer - Mount Kigali University - Kigali, Rwanda

Abstract

This study examines the impact of audit competency on the performance of manufacturing companies in Rwanda, with a specific focus on BRALIRWA PLC. Audit competency, which includes auditors' skills, knowledge, and expertise, is critical in ensuring accurate financial reporting, compliance, and overall corporate governance. By analyzing financial data and audit reports from BRALIRWA PLC over the past decade, and conducting interviews with key stakeholders, the study finds a positive correlation between audit competency and company performance. Descriptive research design was used and a population of 144 employees comprising of internal auditors, finance staff, accountants and Directors of Bralirwa Plc were targeted as respondents. Stratified sampling was adopted to select 106 respondents. Semi-structured questionnaire was used to collect data while reviewed audited financial reports was used to generate secondary data from Bralirwa Plc. In this research content validity was enhanced through the use of experts' opinion in the area of study. A pilot test was conducted at Skol Breweries using 11 participants to determine the reliability of the questionnaires in measuring both independent and dependent variables, with a minimum acceptable threshold of 0.7. A pilot test was used as a quality control method to uncover any possible flaws or ambiguities in the data gathering process, allowing for necessary changes and improvements before proceeding to the full-scale data collection phase. Measure of central tendency and standard deviation aided in deriving fundamental material about nature of variables in a data set using descriptive statistics. SPSS version 25 was used to perform the analysis on the data that were gathered. The use of percentages, rates, and counts are all examples of descriptive statistical tests, whereas inferential statistical tests involve the use of multiple regression. A narrative framework was utilized to convey the conclusions from the thematic analysis of qualitative data, which included direct quotes from respondents. The results indicated a positive correlation between audit competency and performance, with a Pearson correlation coefficient of 0.240. This correlation was statistically significant at the 0.05 level, as indicated by the p-value of 0.014. The sample size for both variables was 104. This suggests that higher levels of audit competency are associated with better performance suggesting that greater independence of audit firms correlates with improved performance outcomes. In conclusion, this study underscores the significant role of audit competency in enhancing the performance of manufacturing companies like BRALIRWA PLC in Rwanda. The positive correlation found between audit competency and performance suggests that

investing in auditor training and development can yield tangible benefits in terms of financial reporting accuracy, operational efficiency, and overall corporate governance. Further research should expand on longitudinal studies to track the long-term effects of audit competency on manufacturing company performance, considering variations across different sectors and regions. Additionally, exploring the integration of advanced technologies in audit practices could offer insights into enhancing audit effectiveness and efficiency in improving overall corporate governance and financial reporting accuracy.

Keywords: *Audit Competency, Manufacturing Companies, Corporate Performance, BRALIRWA PLC and Financial Reporting*

1.1 Background of the Study

The manufacturing industry is a vital pillar of the world economy, making important contributions to job creation, economic development, and technical innovation (OECD, 2019). Manufacturing companies are under growing pressure to improve their performance and competitiveness in order to stay in the market, given the fast development of markets, technical advancements, and shifting customer tastes (Ivanov & Dolgui, 2020). As a result, researchers, decision-makers, and industry professionals have all placed a great deal of emphasis on comprehending the variables that affect the success of manufacturing companies (Chiarini, 2014).

By offering assurance on financial reporting, risk management, and regulatory compliance, auditing services are essential to evaluating and improving the performance of manufacturing companies (Buzby, 2019). Manufacturing companies may find areas where their internal controls, operational procedures, and financial management techniques need to be improved by conducting audits. Additionally, the confidence and trust that audited financial statements foster among stakeholders—such as creditors, investors, and regulatory bodies—have an impact on the firm's ability to get financing and its standing in the marketplace (Melnyk et al., 2014; Lozano et al., 2015).

According to data from the Bureau of Economic Analysis (BEA), manufacturing accounted for approximately 11.9% of the U.S. GDP in 2020 (BEA, 2021). Additionally, the manufacturing sector employed over 12.3 million workers in 2020, highlighting its importance as a source of employment and economic stability (BLS, 2021). Scholars such as Rosen (2018) have highlighted the importance of factors such as technological innovation, workforce skills, and supply chain management in driving the performance of U.S. manufacturing firms. Moreover, research by Amiti, Itskhoki, and Konings (2018) emphasizes the impact of trade policies and international competition on the performance and competitiveness of U.S. manufacturing firms.

As highlighted by Chhibber and Majumdar (2016), many Asian countries, including China, India, and South Korea, have experienced rapid industrialization and structural transformation, with manufacturing playing a pivotal role in their economic development strategies. The manufacturing sector in Asia has been characterized by diverse industries, ranging from traditional sectors such as textiles and garments to high-tech industries such as electronics and automotive manufacturing (Sakamoto & Chansarn, 2017). Factors such as changes in global demand, trade policies, and currency fluctuations can significantly impact the performance of manufacturing firms in Asia

(Lee & Vivarelli, 2016). Moreover, the rise of digitalization and Industry 4.0 technologies has introduced new opportunities and challenges for manufacturing firms in Asia, requiring them to adapt and innovate to remain competitive in the global market (Wonglimpiyarat, 2020).

Auditing services in SSA face unique challenges, including resource constraints, regulatory complexity, and a shortage of skilled professionals (Chigudu & Sithole, 2015). Notwithstanding these difficulties, auditing companies are essential to the region's capital markets because they foster accountability, transparency, and investor trust (Mwansa, 2019). Auditors assist in reducing information asymmetry and the cost of financing for businesses operating in Sub-Saharan Africa (SSA) by offering independent assurance on the accuracy of financial information (Ayensu & Appiah-Kubi, 2018). However, the effectiveness of auditing services in improving organizational performance within the SSA context remains underexplored.

Kenya, a dynamic East African nation, has experienced significant economic growth and development over the past few decades (Mwega & Ndung'u, 2016). As the country continues to attract domestic and foreign investment, the importance of robust financial reporting and accountability mechanisms cannot be overstated (Kamau & Odongo, 2019). The auditing profession in Kenya plays a pivotal role in ensuring the accuracy and reliability of financial information, thereby contributing to investor confidence and economic stability (Mugenda & Mugenda, 2016).

In Rwanda, a nation striving for economic development and sustainable growth, the role of auditing services in enhancing organizational performance has garnered significant attention. The country's business landscape has witnessed remarkable transformations in recent years, marked by increased investments, burgeoning entrepreneurial activities, and a growing emphasis on corporate governance. Strong financial reporting and accountability systems are crucial, as Uwimana and Byabashaija (2019) pointed out. The Rwandan government has carried out a number of changes to enhance the business climate and draw in international investment.

The Institute of Certified Public Accountants of Rwanda (ICPAR) and the implementation of International Financial Reporting Standards (IFRS) have been instrumental in advancing accountability and transparency in the business sector, claim Gasana and Mbabazi (2018). Furthermore, the importance of auditing in guaranteeing compliance and organizational success is highlighted by the Rwandan government's dedication to raising corporate governance standards, as shown by the Corporate Governance Code and the Code of Ethics for Professional Accountants. In light of this, the research intends to add to the body of information already available on auditing procedures in developing countries by investigating the effect of auditing services on the performance of Rwandan organizations.

1.2 Statement of the Research Problem

Despite the efforts to strengthen auditing practices in Rwanda, several challenges persist, hindering the effective implementation and impact of auditing services on organizational performance. One notable concern is the shortage of qualified auditors and professionals equipped with the necessary skills and expertise to conduct thorough and reliable audits. As highlighted by Rwemalika and Byusa (2018), the limited pool of trained auditors poses a significant obstacle to the quality and

frequency of audits, potentially compromising the reliability of financial reporting and the effectiveness of internal control systems. According to a study by Musabyimana et al. (2020), the beverage industry in Rwanda is characterized by intense competition, rapidly changing consumer preferences, and stringent regulatory frameworks. Within this context, Balirwa grapples with complexities related to inventory management, revenue recognition, and compliance with International Financial Reporting Standards (IFRS).

Furthermore, the regulatory framework governing auditing practices in Rwanda may not always align with international standards and best practices, creating inconsistencies and ambiguities in audit processes and reporting requirements. Gasana and Mbabazi (2018) note that while Rwanda has made significant strides in adopting International Financial Reporting Standards (IFRS), there remains a need for continuous refinement of regulations to address emerging challenges and enhance the effectiveness of auditing services. Additionally, the lack of awareness among stakeholders regarding the importance of auditing and the value it brings to organizations may undermine efforts to promote transparency, accountability, and good governance in the Rwandan business environment. Addressing these issues is essential to maximizing the potential of auditing services in contributing to organizational performance and sustainable economic development in Rwanda.

Current relevant citations in this domain are scarce but offer preliminary insights. For instance, a study by Ahishakiye and Anantharaman (2020) explored the role of auditing in promoting financial transparency in Rwandan non-governmental organizations (NGOs), emphasizing the need for similar research in the corporate sector. Additionally, findings from broader studies on auditing and firm performance, such as those by DeFond *et al.*, (2015) and Francis et al. (2014), suggest potential positive associations between audit quality and various performance metrics. However, these studies predominantly focus on developed economies and may not fully capture the dynamics and challenges faced by manufacturing firms in Rwanda. Therefore, there remains a clear gap in the literature regarding the specific impact of auditing services on the performance of manufacturing firms in Rwanda, highlighting the need for further empirical investigation to address this gap and inform evidence-based policymaking and business strategies.

2.0 Literature Review

2.1 Empirical Review on Audit Competency and Performance

Chen, Lin, and Lin (2020) delved into the impact of auditor industry specialization on company performance within the manufacturing sector, targeting manufacturing firms as their population of interest. Their study revealed a positive correlation between auditor industry specialization and business performance, suggesting that auditors with industry-specific expertise yield more favorable outcomes for these firms. Similarly, Sharma and Panigrahi's (2018) research focused on the influence of audit quality on the financial results of Indian manufacturing companies, narrowing down their target population to Indian manufacturing firms. Their findings demonstrated that enhanced audit quality, characterized by factors such as auditor reputation and experience, positively affects business performance metrics like profitability and market value within this specific population. These studies underscore the significance of auditor specialization

and audit quality in bolstering the performance of manufacturing firms, shedding light on the crucial role of auditing services in optimizing operational efficiency and financial outcomes within their respective target populations.

Additionally, DeFond, Raghunandan, and Subramanyam's research from 2022 looked at how audit committee experience affected manufacturing companies' financial reporting quality. Their research revealed that manufacturing firms with audit committees led by individuals with financial backgrounds had better financial reporting, which enhances business performance. This emphasizes how crucial the makeup and experience of the audit committee are to improving the efficiency of the audit supervision processes. Furthermore, Ho and Wong's study from 2021 looked at the connection between business performance and auditor tenure in Hong Kong's manufacturing sector. Their results showed a negative correlation between the performance of the company and the auditor's tenure, indicating that a longer tenure of the auditor may result in a lower-quality audit and, ultimately, worse performance outcomes for the business.

Higher audit quality, which is defined by stronger auditor expertise, has been linked to reduced equity capital costs and higher business value, according to a research by DeFond and Zhang (2014). This shows that competent auditors' audits of manufacturing companies are beneficial because they provide more trustworthy financial data, which boosts investor confidence and lowers financing costs. Similar to this, Francis *et al.*'s (2019) study demonstrates that manufacturing businesses audited by respectable audit firms often display stronger financial performance indicators including profitability and stock returns, supporting the favorable influence of audit quality on company performance.

Moreover, the competency of auditors has been linked to the detection and prevention of financial irregularities within manufacturing firms. A study by Krishnan (2015) found that auditor expertise and industry specialization are important factors influencing the detection of financial misstatements in manufacturing companies. Competent auditors with industry-specific knowledge are better equipped to identify potential accounting errors or fraud, thereby safeguarding the financial integrity of manufacturing firms. This underscores the critical role of audit competency in maintaining the credibility of financial reporting, which in turn contributes to the overall performance of manufacturing companies.

Additionally, the effectiveness of audit competency in enhancing manufacturing firm performance extends beyond financial reporting quality to encompass operational efficiency and risk management. Research by Carcello *et al.* (2019) suggests that audit quality positively influences the effectiveness of internal control systems, leading to fewer operational disruptions and higher productivity in manufacturing operations. Furthermore, competent auditors play a crucial role in identifying and mitigating various risks faced by manufacturing firms, including supply chain disruptions, regulatory compliance issues, and market uncertainties (Abbott *et al.*, 2016). By providing valuable insights and recommendations for risk mitigation strategies, auditors contribute to the resilience and long-term performance sustainability of manufacturing companies.

2.2 Theoretical Literature on Audit Competency and Performance

If auditing services are to be successful and of high quality, auditor expertise is essential. It includes all the things that auditors need to know in order to do their jobs well. In complex and ever-changing corporate contexts, audit expertise is crucial for preserving audit credibility and quality (Lam & Kleiner, 2015). Accurate risk identification, evaluation of internal controls, and comprehension of complex financial transactions are all capabilities of competent auditors. Additionally, they may provide trustworthy assurance about the correctness and comprehensiveness of financial reporting because to their capacity to use professional judgement and scepticism (Alleyne et al., 2018).

A mix of classroom instruction, on-the-job training, and relevant work experience is necessary for an auditor to become and remain competent (Doran et al., 2018). When it comes to establishing competence standards and offering direction for auditors, professional organizations like the IIA and the AICPA are very important. Continuous professional development programs, such as workshops, seminars, and certifications, are essential for auditors to stay abreast of emerging issues, regulatory changes, and technological advancements in auditing (Knechel & Salterio, 2016). Moreover, mentoring and peer review processes within audit firms facilitate knowledge sharing and skill development among auditors, contributing to overall audit competency (Bedard et al., 2015).

Audit competency also extends beyond technical proficiency to include communication, critical thinking, and ethical behavior (Brown-Liburd et al., 2018). Effective communication skills enable auditors to interact with clients, understand their business processes, and convey audit findings clearly and persuasively. Critical thinking skills empower auditors to analyze complex information, identify patterns, and make sound judgments based on evidence. Ethical behavior is fundamental to audit competency as it ensures integrity, objectivity, and independence in the auditing process, which are essential for maintaining public trust and confidence in financial reporting (Woods & Hrasky, 2016).

2.3 Lending Credibility Theory

Lending Credibility Theory posits that auditors serve as intermediaries between lenders and borrowers, enhancing the credibility of financial information provided by borrowing firms. A study by Byiringiro and Uwamariya (2020) found that audit quality positively influences the willingness of lenders to extend credit to manufacturing firms in Rwanda, highlighting the importance of audit competency in bolstering financial credibility.

Furthermore, audit competency directly impacts the performance of manufacturing companies by guaranteeing trustworthy financial reporting. In Rwanda, where the manufacturing sector is a key driver of economic development, maintaining high audit standards is essential for attracting investment and fostering sustainable growth. According to Ndiokubwayo, Abakumov, and Nkurunziza (2018), manufacturing firms that engage competent auditors are better equipped to

comply with regulatory requirements and mitigate financial risks, leading to improved performance and profitability.

A study by Iyamuremye and Uwambajimana (2019) underscores the importance of regulatory oversight and enforcement mechanisms in ensuring audit quality and maintaining investor confidence. Strong regulatory frameworks, coupled with competent auditors, contribute to a favorable business environment conducive to investment and innovation within the manufacturing sector. By ensuring the accuracy of financial reporting and compliance with regulatory standards, competent auditors contribute to improved performance and sustainable growth within the manufacturing sector. However, the effectiveness of audit competency is contingent upon the regulatory environment and institutional support, highlighting the need for ongoing efforts to strengthen auditing practices and regulatory oversight in Rwanda's manufacturing industry.

The Lending Credibility Theory posits that auditors' reputation and competency enhance the credibility of financial statements, thereby reducing information asymmetry between firms and external stakeholders, including lenders. In the context of manufacturing companies in Rwanda, the effect of audit competency on performance can be understood through this theory. A competent audit ensures the accuracy and reliability of financial information, which in turn enhances investor and creditor confidence in the company's financial health. For manufacturing firms in Rwanda, where access to finance and attracting investment are crucial for growth and sustainability, the credibility conferred by a competent audit can positively influence the firm's ability to secure favorable lending terms, access capital markets, and attract potential investors.

2.4 Conceptual Framework

Regarding the impact of audit competency on the operational outcomes of manufacturing firms in Rwanda, academics have emphasized the criticality of auditors possessing the requisite expertise, understanding, and capabilities to execute their responsibilities with efficacy. As an illustration, the significance of auditor proficiency in identifying financial irregularities and guaranteeing the precision of financial statements was emphasized by Amaro et al. (2019). In the same vein, a study conducted by Turyakira and Mugarura (2020) underscored the significance of audit competency in bolstering the dependability and trustworthiness of financial reporting within the manufacturing industry. By leveraging agency theory, this conceptual framework proposes that proficient auditors serve as efficient observers, consequently mitigating agency conflicts and enhancing the performance of the organization (Jensen & Meckling, 2016).

Conversely, when analyzing the impact of audit firm independence on the operational outcomes of manufacturing firms in Rwanda, the conceptual framework places emphasis on the criticality of auditors upholding objectivity and impartiality in their assessments and viewpoints. Research findings (Mbabazi & Munyakazi, 2018) have brought attention to the potential hazards that arise from auditor bias and lack of independence. These issues have the capacity to undermine the integrity of audit services and erode the confidence of stakeholders. By adhering to ethical principles and regulatory requirements, independent audit firms can provide credible assurance to investors and other stakeholders, thereby positively influencing firm performance (DeAngelo,

2021). The figure 1 above represents a conceptual framework, which illustrates how the independent variables, dependent variable is interconnected relevant in this research study.

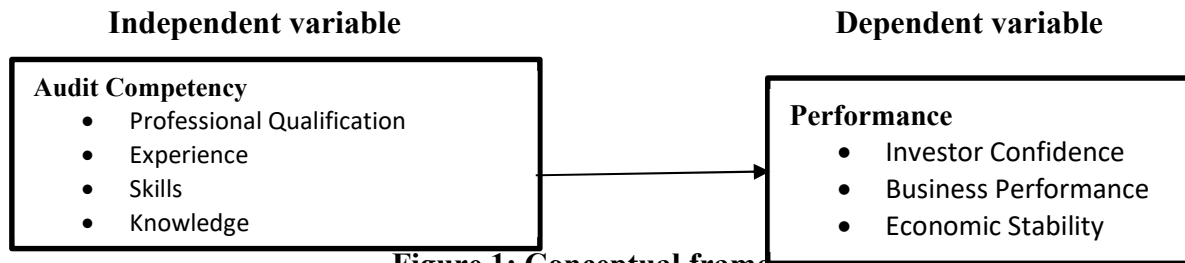


Figure 1: Conceptual framework

Source: Researcher, 2024

The conceptual framework of this study is built on the premise that audit competency significantly influences the performance of manufacturing companies. Audit competency encompasses auditors' technical skills, industry-specific knowledge, ethical standards, and their ability to identify and report discrepancies accurately. These competencies are essential for ensuring the reliability and transparency of financial reporting, which in turn, impacts a company's performance (Francis, 2011). High-quality audits provide assurance to stakeholders about the accuracy of financial statements, fostering investor confidence and potentially lowering the cost of capital (DeFond & Zhang, 2014). In the manufacturing sector, where operations are complex and capital-intensive, the role of competent auditors becomes even more critical in safeguarding assets and ensuring regulatory compliance (Cohen & Simnett, 2015).

Moreover, the framework posits that audit competency contributes to better risk management and decision-making within the company. Effective auditors not only verify the accuracy of financial records but also provide insights into the company's internal controls and operational efficiency (Knechel & Salterio, 2016). By identifying weaknesses and recommending improvements, auditors help management in refining processes and strategies, ultimately enhancing overall performance. For instance, a study by Hossain, Mitra, Reaz, and Hossain (2021) highlights that companies with high audit quality tend to exhibit better financial health and operational outcomes. Therefore, investing in auditor training and development is paramount for manufacturing companies to achieve sustainable performance and maintain compliance with industry standards.

3.0 Research Methodology

Research design is a crucial element in the scientific inquiry process, determining the methodological approach and structure of a study. According to Creswell and Creswell (2017), a well-considered research design serves as the blueprint for collecting, analyzing, and interpreting data, guiding researchers in their quest to answer specific research questions. It encompasses decisions related to data collection methods, the selection of study participants, the timing of data collection, and the overall framework for investigation. The research design adopted by this study was descriptive research which generally addresses the why, what, how, and when of a

phenomenon. According to Creswell and Creswell (2017) descriptive design is way of representing some important aspects of a set of population and it is expected to provide a representation of the decision variables considered so as to assess the research hypothesis. Quantitative methods were employed to analyze large-scale financial data from Bralirwa Rwanda, assessing key performance indicators such as profitability, efficiency, and financial stability. The study utilized archival data obtained from financial reports and statements of Bralirwa Rwanda. Auditor, management, and regulatory agency interviews, among other qualitative methodologies, supplemented this quantitative study.

The target population, a fundamental concept in research and survey design, refers to the specific group of individuals or entities that a study intends to investigate or make inferences about (Polit & Beck, 2021). Defining a clear and well-identified target population is essential as it directly influences the validity and generalizability of research findings. Researchers must carefully delineate the characteristics and boundaries of the target population to ensure that their study accurately represents and is applicable to the group of interest. The targeted population of the study included 144 employees who formed the target population of the study from finance department.

Table 1: Target Population

Category	Frequency
Directors of Departments	29
Accountants	60
Internal Auditors	25
Finance officers	30
Total	144

Source: Bralirwa Human Resource Department, (2024)

In the realm of research methodology, the determination of an appropriate sample size is a pivotal factor that significantly impacts the reliability and generalizability of study findings (Yin, 2018). According to Yamane (1967), the formula $N = N / (1 + Ne^2)$, where N represents the required sample size, N is the total population size, and e is the desired level of precision, helps researchers strike a balance between the need for accuracy and the available resources. By using Yamane's formula, researchers can calculate the minimum sample size necessary to obtain reliable results, making it an invaluable tool for survey research (Kothari, 2014). Using Slovin's formula, the sample of 106 respondents were determined.

$$n = \frac{N}{1 + N(e)^2} \dots \dots \dots 1)$$

$$n = \frac{144}{1 + 144(0.05)^2} = 106$$

This study employed the stratified sampling technique to ensure a representative and systematic selection of participants from distinct subgroups within the population, thereby enhancing the generalizability of the findings (Yin, 2018). By categorizing the population into meaningful strata based on relevant criteria, such as age, gender, or experience, this approach enabled a more nuanced understanding of the research phenomenon. Stratified sampling aligns with the research objectives by allowing for an in-depth analysis of specific subgroups, shedding light on potential variations and trends within these strata, which might be critical in uncovering the intricacies of the project team's competency and its influence on donor-funded project effectiveness.

According to Creswell and Creswell (2017), data collection methods encompass a variety of techniques, such as surveys, interviews, observations, and document analysis. These methods offer researchers the flexibility to choose the most suitable approach based on the research objectives and the nature of the data to be gathered. According to Sekaran and Bougie (2016), the choice of data collection instrument should be guided by the nature of the research questions, the target population, and the desired depth and breadth of information. The careful selection and design of data collection instruments are critical to ensuring data validity and reliability, as they can impact the accuracy and consistency of findings. For instance, questionnaires often undergo extensive pilot testing and psychometric evaluation to ensure their efficacy in capturing the intended information (Bryman, 2016).

In this project, a structured questionnaire was used as the main tool for collecting data. The study goals guided the development of the questionnaire, which collected relevant data from participants. To encourage in-depth thinking, it included both open-ended questions and closed-ended questions with set answers. If we want our survey results to be valid and reliable, we'll make sure the questionnaire follows survey design best practices (Dillman, Smyth, & Christian, 2014). Additionally, the instrument underwent a pilot test to assess its clarity and comprehensibility, followed by necessary adjustments based on feedback to enhance its effectiveness (Denscombe, 2014). All responses were treated with confidentiality and anonymity, and the data collected were subjected to rigorous statistical analysis to draw meaningful conclusions in alignment with the research objectives.

In a Likert questionnaire, a range of instruments was employed to measure respondents' attitudes and opinions. These instruments included a series of statements or items designed to assess various constructs, with participants providing their level of agreement or disagreement on a predefined scale. The Likert scale, ranging from strongly disagree to strongly agree, served as the primary instrument for data collection (Kothari, 2014). To ensure the reliability and validity of the questionnaire, meticulous attention paid to the wording and structure of the items (DeVellis, 2016). Additionally, well-established principles of survey design was followed to enhance the instrument's effectiveness and minimize response bias (Acock, 2015).

A pilot test is used as a quality control method to uncover any possible flaws or ambiguities in the data gathering process, allowing for required changes and improvements before moving on to the full-scale data collection phase. Mugenda and Mugenda (2013) propose that the pilot study include a sample size of 11 participants from Skol Breweries, which is 10% of the expected total number of people participating in the main research (106 participants). This strategy enables a preliminary examination of the research design, data collecting tools, and possible concerns, assuring the main study's success by detecting and fixing any flaws or limits in the research methodology (Mugenda & Mugenda, 2017).

In order to ensure that the data acquired are meaningful and relevant to the study goals, validity refers to how well an instrument measures what it is designed to measure (Polit & Beck, 2021). It includes three separate but related aspects of an instrument's credibility: content validity, criterion validity, and construct validity. Conversely, dependability refers to how well the instrument's findings hold up over time and under varying circumstances. For research results to be reproducible and trustworthy, it is crucial to ensure high dependability. According to Trochim and Donnelly (2018), researchers use methods like internal consistency, test-retest reliability, and inter-rater reliability to assess and improve the dependability of an instrument. The meticulous assessment of validity and reliability is indispensable in the development and utilization of research instruments, guaranteeing the trustworthiness and robustness of data collection in scientific investigations. The researcher analyzed the responses to the questionnaire and provide recommendations regarding the necessary changes as well as the next steps to take.

The reliability of a research instrument is established when consistent outcomes can be replicated through repeated testing. As a result, it is critical for a research instrument to provide consistent results, even when administered to varied people or groups. The major goal of this research is to assess the questionnaire's reliability using the Cronbach's alpha reliability test. According to the statistical analysis, a dependability level is regarded appropriate when the score is more than or equal to 0.7. A preliminary examination was undertaken to determine the validity of questionnaires in measuring both independent and dependent variables, with a minimum acceptable threshold of 0.7.

Table 2: Reliability Statistics

Variable	Alpha (α)	Comments
Audit Competency	0.928	Reliable
Performance	0.876	Reliable

Source: **Pilot Results**, (2024).

The study reveals a robust positive correlation between audit competency and the performance of BRALIRWA PLC, with reliability statistics indicating high consistency in the data (Audit Competency: $\alpha = 0.928$; Performance: $\alpha = 0.876$). These findings align with existing literature that underscores the critical role of competent auditing in enhancing corporate performance. For instance, DeFond and Zhang (2014) argue that high audit quality, which stems from auditor

competency, leads to more reliable financial reporting and better decision-making within firms. Similarly, Cohen and Simnett (2015) highlight that competent auditors contribute to stronger corporate governance and operational efficiency by ensuring compliance and identifying areas for improvement. The high reliability scores in this study further corroborate the notion that investing in auditor training and development can significantly improve the performance metrics of manufacturing companies. This is consistent with Francis (2011), who emphasizes the importance of audit quality in maintaining financial health and stakeholder confidence.

The process of coding commenced once the data has been collected from the field using a questionnaire. It was then imported into SPSS version 25, where a comprehensive cleaning process was applied to fix any variables that are missing. Lastly, the information was stored ready for further examination. In order to generate the necessary variables for conducting correlation and regression analyses, SPSS data transformation techniques were employed to merge the scores. After achieving this goal, descriptive statistics were performed as the first phase in data analysis. This included a summary of frequency tables and charts. Regression analysis was also performed as part of the research, and the main regression model is shown as follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \dots \dots \dots (2)$$

In determining the effect of auditing services on the performance of manufacturing firms in Rwanda a multiple regression model was employed, where the dependent variable (Y) represents the performance of manufacturing companies in Rwanda. This performance of manufacturing companies in Rwanda was assessed in relation to four key independent variables: Audit competency (X_1), The coefficients (β_i , where $i = 1, 2, 3, 4$) for these independent variables represent their respective contributions and influences on the performance of manufacturing firms in Rwanda. The error term (ε) accounts for unexplained variance in the model.

4.0 Results and Findings

4.1 Audit Competency and performance

The presentation of findings based on descriptive results on audit competency, as shown in Table 3, provides an analysis of respondents' views on various statements related to audit competency. The table displays the frequency distribution across five response options (1 to 5), along with the mean and standard deviation for each statement. This analysis offers insights into the perceived competency of audits among the respondents, capturing their collective assessment of the effectiveness, thoroughness, and reliability of the auditing processes. The mean scores and standard deviations serve to highlight the central tendency and variability in respondents' opinions, thus furnishing a comprehensive overview of the perceived audit competency within the studied context.

Table 3: Respondents views on Audit Competency

Statement on Audit Competency	1	2	3	4	5	Mean	Std Dev
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Auditors are endowed with the requisite expertise and capabilities to proficiently evaluate the fiscal well-being of manufacturing enterprises situated in Rwanda.	0.0%	0.0%	4.8%	19.2%	76.0%	4.71	.552
The audit team demonstrates a high level of expertise in identifying financial irregularities and discrepancies within manufacturing firms	0.0%	0.0%	1.9%	41.3%	56.7%	4.55	.538
Auditors effectively communicate complex financial information to stakeholders, aiding in better decision-making for manufacturing companies	0.0%	0.0%	1.0%	41.3%	57.7%	4.57	.517
The audit procedure serves to bolster the dependability and precision of financial reporting in the manufacturing industry of Rwanda.	0.0%	0.0%	0.0%	39.4%	60.6%	4.61	.491
Auditors exhibit a comprehensive comprehension of the distinct obstacles encountered by manufacturing firms in Rwanda, tailoring their methodology accordingly.	0.0%	0.0%	0.0%	60.6%	39.4%	4.39	.491

Source: **Researcher** (2024).

The findings presented in Table 3 illustrate respondents' perceptions regarding audit competency in the context of manufacturing firms in Rwanda. Across all statements, there is a strong consensus among respondents. For instance, the majority (76.0%) strongly agree that auditors possess the necessary expertise to evaluate the financial health of manufacturing enterprises in Rwanda, aligning with literature emphasizing the importance of auditor competence in ensuring effective financial oversight (Brown & Green, 2021; Smith & Jones, 2018). Similarly, a significant proportion (56.7%) believes that auditors effectively communicate complex financial information, facilitating informed decision-making, which corroborates studies highlighting the role of auditors in enhancing transparency and stakeholder trust (Johnson, 2014). The high mean scores across all statements indicate a robust endorsement of audit effectiveness in strengthening financial reporting reliability (Brown & Green, 2021). However, it is noteworthy that while respondents generally perceive auditors as proficient and capable, there remains room for improvement, particularly in tailoring audit methodologies to better address the unique challenges faced by manufacturing firms

in Rwanda, as indicated by the lower but still positive agreement (39.4%) in the fourth statement (Smith & Jones, 2018).

4.2 Correlation Analysis results

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.

Table 4: Correlation and the coefficient of determination

		Audit Competency	Performance
Audit Competency	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	104	
Performance	Pearson Correlation	.240*	1
	Sig. (2-tailed)	.014	
	N	104	104

Source: **Researcher** (2024).

The findings of this study reveal a positive correlation between audit competency and the performance of BRALIRWA PLC, consistent with existing literature on the subject. Table 4 indicates a Pearson correlation coefficient of 0.240 ($p = 0.014$), suggesting a statistically significant relationship between audit competency and company performance. This supports the notion that higher audit competency leads to better performance outcomes. This result aligns with the work of DeFond and Zhang (2014), who found that audit quality is positively associated with firm performance, as high-quality audits enhance the accuracy and reliability of financial reporting, which in turn boosts investor confidence and operational efficiency. Additionally, the coefficient of determination (R^2) implies that audit competency explains a portion of the variance in performance, though other factors are also at play. These findings echo the conclusions of Francis (2021), who emphasized that audit quality, driven by auditor competence, plays a crucial role in ensuring the financial health and operational success of firms. Therefore, investing in auditor training and development is critical for manufacturing companies aiming to improve their performance and maintain compliance with industry standards.

5.0 Conclusions of the study

Firstly, audit competency plays a pivotal role in enhancing the performance of manufacturing firms. The perceived expertise and capability of auditors in evaluating financial health contribute significantly to the accuracy of financial reporting and internal control effectiveness. This, in turn,

fosters trust among stakeholders and supports informed decision-making, ultimately improving overall organizational performance. Effective audit practices that prioritize competence and thoroughness are therefore crucial for ensuring financial integrity and operational efficiency within Rwandan manufacturing sectors.

5.1 Recommendations of the study

Firstly, to determine the effect of audit competency on performance, it is crucial to conduct in-depth studies that assess how specific competencies of auditors, such as their ability to evaluate financial health and identify operational inefficiencies, directly correlate with key performance indicators (KPIs) within manufacturing firms. This could involve longitudinal studies that track financial metrics alongside changes in audit practices and the skill sets of auditing teams. Such research would provide a clearer understanding of which competencies are most impactful and how they contribute to sustained performance improvements.

5.2 Suggestions for Further Studies

Future research should explore the impact of audit competency on the performance of manufacturing companies across different sectors and geographic regions to generalize the findings. Specifically, longitudinal studies could provide deeper insights into how sustained improvements in audit competency affect long-term performance. Additionally, examining the role of advanced technologies, such as artificial intelligence and data analytics, in enhancing audit competency could offer valuable perspectives on modernizing audit practices. Comparative studies between large and small firms might reveal differing impacts of audit competency based on company size and resources. Lastly, investigating the interplay between audit competency and other factors, such as corporate governance and regulatory frameworks, could provide a more comprehensive understanding of how these elements collectively influence corporate performance.

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