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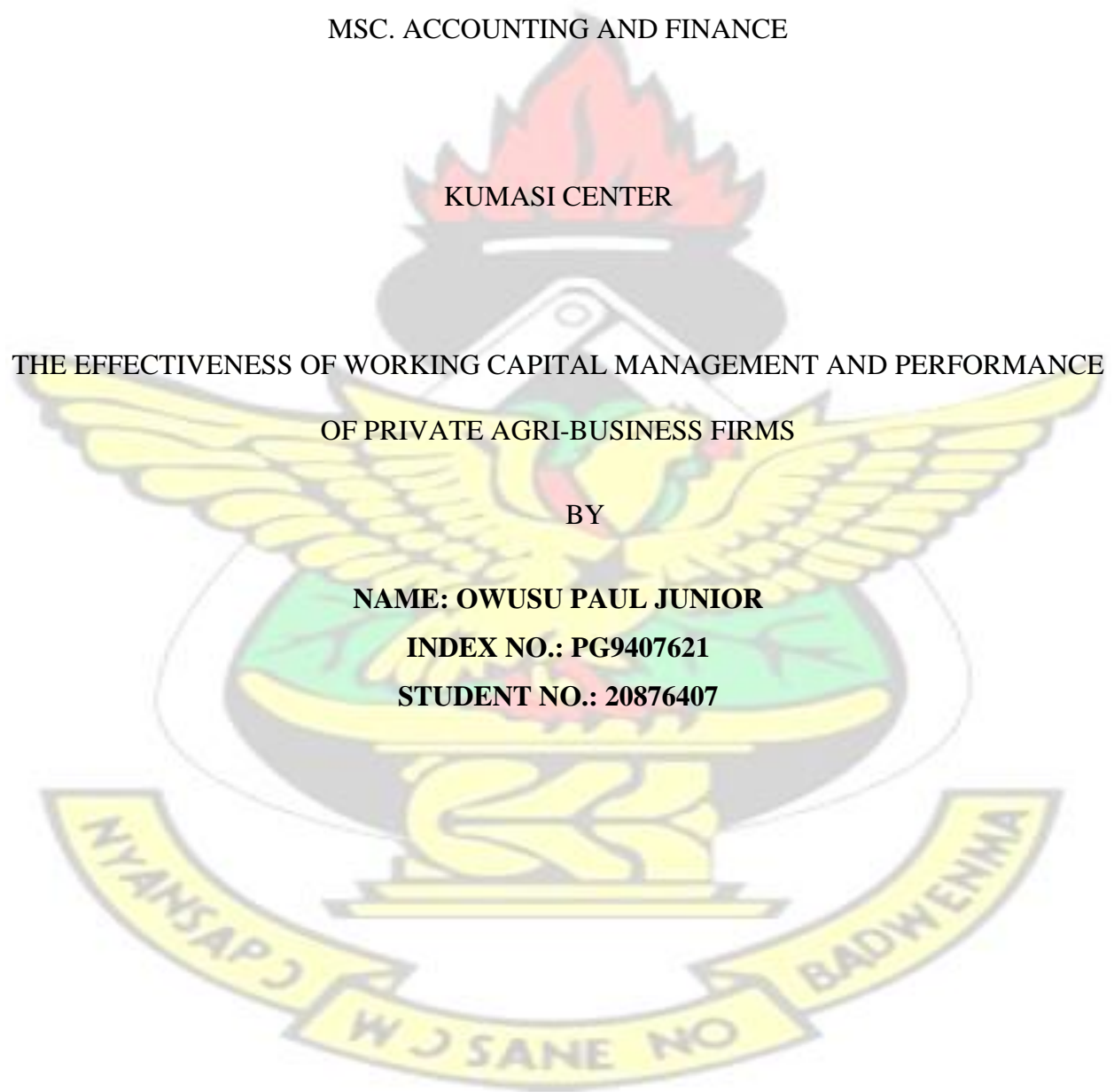
THE EFFECTIVENESS OF WORKING CAPITAL MANAGEMENT AND PERFORMANCE
OF PRIVATE AGRI-BUSINESS FIRMS

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DEDICATION

This thesis work is, dedicated to the almighty God for His protection, guidance and care. I also dedicate this masterpiece to our lecturer and supervisor Dr. Nicholas Boamah for his stupendous support and contribution to seeing this work to completion. God bless you, sir. Finally, I dedicate this masterpiece to my parents and friends for their tremendous support in seeing us through our two years of studies at Kwame Nkrumah University of Science and Technology.



DECLARATION

I hereby declare that, this submission is my own work towards the award of the Master of Science in Accounting and Finance and that to the best of my knowledge, it contains on materials previously published by another person nor any material that has been accepted for any other degree of this or any university, except where due acknowledgment has been made in the text.

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My profound appreciation goes to the Lord Almighty for His strength and guidance throughout this academic journey. Special gratitude also goes to my supervisor **Dr. Nicholas Boamah** for His excellent supervision, guidance, and motivation which has empowered me to successfully complete this journey. May the God Almighty continue to bless him and protect him. I would like to acknowledge the support enjoyed by my lecturers, learned colleagues, family members, and all my friends who in diverse ways have contributed to the success of this journey. I expressed our gratitude to all the finance staff at all the companies especially Afarinick Company Limited for their immense contributions they made towards my data collection.

May the Good Lord Bless you all.



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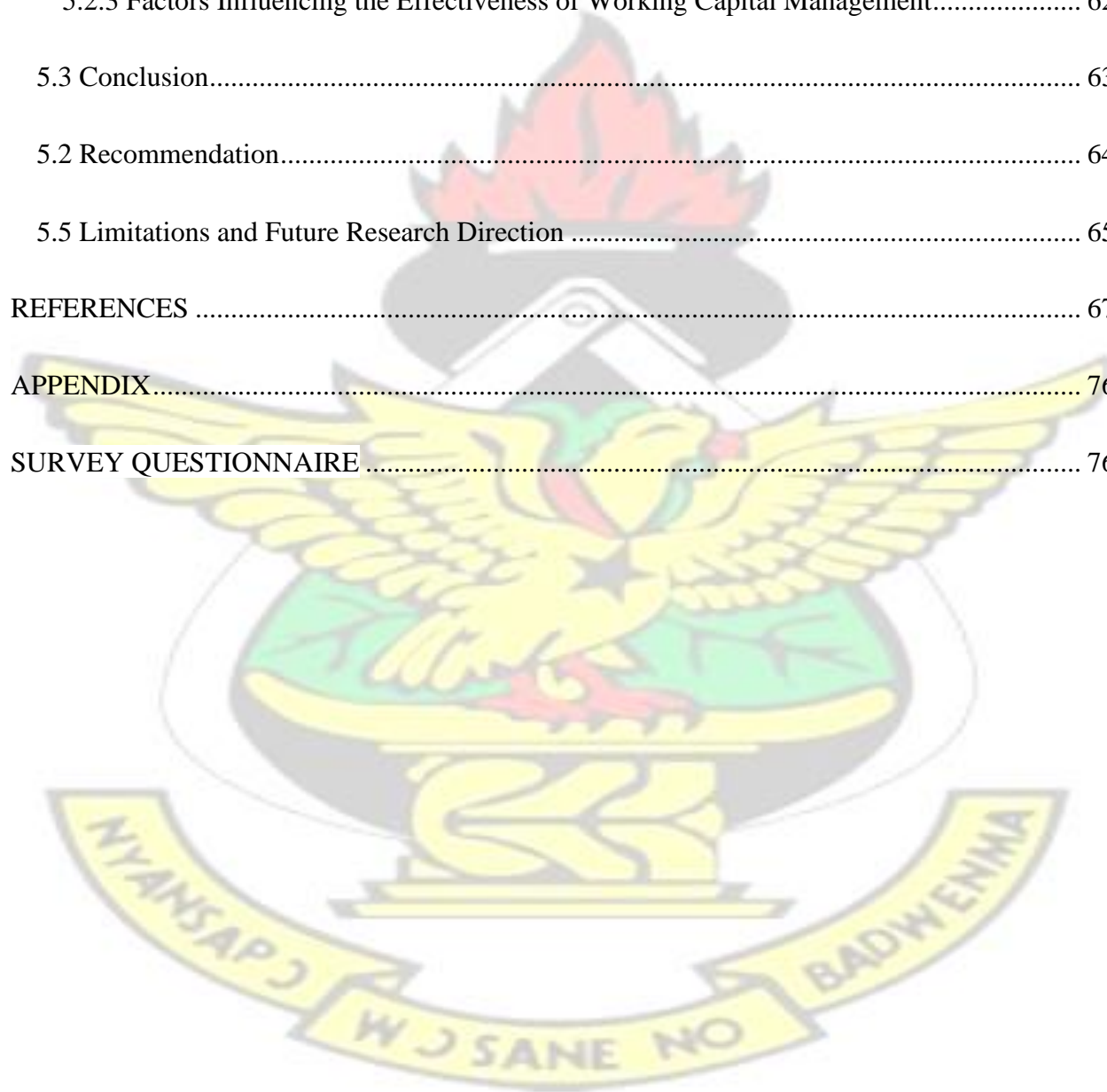
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LIST OF ABBREVAITIONS

1. WCM..... Working Capital Management
2. FP..... Financial Performance
3. CCC..... Cash Conversion Cycle
4. APM..... Accounts Payable Management
5. ARM..... Accounts Receivable Management
6. AP..... Accounts Payable
7. AR..... Accounts Receivables
8. CR..... Current Ratio
9. QR..... Quick Ratio
10. SMEs..... Small and Medium Enterprises
11. INV..... Inventory
12. ROI..... Return on Investment



ABSTRACT

The aim of this study was to assess the operational efficiency of private agribusinesses in Ghana by examining their management of working capital and financial performance. The study utilised quantitative approaches and performed inferential analysis. The study utilised a cross-sectional, descriptive research methodology. The study focused on persons who held ownership or top executive roles inside private agri-businesses in Ghana, constituting the target group. The research employed purposive sampling to choose a sample of 154 participants who have specialised knowledge in the effectiveness of working capital management and the performance of private agri-business enterprises. The study hypotheses were assessed using SPSS version 26. Descriptive statistics were utilised to present a thorough overview of the data. The hypotheses of the probe were evaluated using regression analysis. According to the findings, private agri-businesses in Ghana mostly use inventory management and account payable management as their principal working capital management procedures, while account receivable management is less popular. The study's findings suggest that efficient inventory management significantly and positively impacts the financial performance of private agri-business businesses in Ghana. Nevertheless, it was noted that the effects on financial performance were not comparable for accounts receivable and payable. The study concluded that the market environment, financial situation, and supplier connection were not deemed major determinants of the effectiveness of working capital management in private agri-business businesses in Ghana. Nevertheless, it was noted that the most significant and widespread factors affecting the efficiency of working capital management in these organisations were management assistance and technology. Senior executives should actively participate in financial decision-making and allocate sufficient resources and support to initiatives aimed at improving working capital efficiency.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Financial managers largely depend on the practice of WCM, which entails the optimization of a company's liquidity to effectively fulfill its immediate financial obligations, while simultaneously maximizing the returns generated from its existing assets and liabilities. WCM involves the management of inventories, accounts receivable, and accounts payable with the aim of optimizing cash flow, reducing operating expenses, and enhancing profitability (Afrifa and Tingbani, 2018). Private agricultural firms require significant investments in working capital to sustain their production, distribution, and marketing activities, hence underscoring the importance of WCM. Private agriculture firms heavily depend on efficient WCM due to the nature of their operations, which involve handling perishable goods and dealing with fluctuating prices. According to Goncalves et al. (2018), the implementation of efficient WCM practices has the potential to improve the financial performance of agricultural operations. Conversely, the absence of effective WCM can lead to financial challenges and reduced profitability.

A significant proportion of the Ghanaian population depends on agriculture as their primary source of income, and this sector plays a crucial role in contributing to the country's Gross Domestic Product (GDP) (World Bank, 2017). Private agri-business enterprises play a crucial part in the agricultural economy through their provision of input supply, processing, storage, and marketing services. According to Ferreira et al. (2022), these enterprises have a significant role in fostering the expansion of the agriculture industry through the optimization of the value chain and the creation of employment prospects. Over the past few years, Ghanaian private

agriculture firms have encountered various challenges, such as limited capital accessibility, inadequate infrastructure, and fluctuating markets (Ferreira et al., 2022). Despite the aforementioned challenges, the agri-business sector has demonstrated persistent growth, hence generating a burgeoning enthusiasm for such operations in Ghana. Governmental, non-governmental organizations (NGOs), and international organizations have extended support to private agri-business enterprises through several initiatives aimed at fostering agricultural development and ensuring food security (OECD, 2019).

Recent studies have revealed a significant association between WCM and financial performance across many countries and industries. Nguyen et al. (2020) identified a significant positive correlation between WCM and profitability within the context of an emerging market. In their study, Gill et al. (2022) examined the operational efficiency of WCM within the Indian cement industry. The authors discovered that effective management of working capital has the potential to enhance the profitability of firms. In a similar vein, the study conducted by Akbar et al. (2021) investigated the impact of WCM on small and medium-sized enterprises (SMEs) in Pakistan. The findings of their research revealed a positive association between effective WCM practices and enhanced financial performance among organizations. In their recent study, Panda et al. (2021) identified compelling data supporting a significant positive association between WCM and market value within Nigerian enterprises. In their study, Mansoori and Muhammad (2012) conducted an evaluation of the impact of WCM on the profitability of enterprises in Singapore. Their findings revealed that companies that successfully apply efficient WCM practices tend to exhibit higher levels of profitability.

According to a study conducted by Habib and Kayani (2022), it was found that UAE-based companies with robust WCM exhibited a lower likelihood of experiencing financial difficulties

compared to companies with less effective WCM practices. In their study, Vural et al. (2012) investigated the relationship between WCM and business performance within the context of Turkey. Their findings revealed a favorable association between these two variables. Ren et al. (2019) conducted an analysis to examine the effects of effective WCM on company performance in Chinese enterprises. The study revealed a beneficial influence of WCM on company performance. Almomani et al. (2021) conducted study which indicates a significant correlation between WCM and organizational performance in the context of Jordan.

Based on the comprehensive review of existing literature, several areas of study deficiency have been identified pertaining to the efficacy of WCM and the performance of private agriculture firms. There is a scarcity of research in the private agricultural industry about the impact of WCM on company performance, despite the existence of studies examining this relationship in several industries and nations. The relationship between WCM and performance may be influenced by the unique characteristics of private agriculture firms, such as the seasonality of their operations and the perishability of their goods. This study aims to fill this gap by examining the relationship between WCM and performance in privately-owned agribusiness firms.

The significance of examining the efficacy of WCM in private agri-business enterprises stems from their pivotal role within the agricultural sector, which serves as a substantial contributor to the economies of numerous nations. In addition, the agricultural company sector encounters distinct obstacles, including weather-related uncertainties and regulatory limitations, that underscore the significance of implementing efficient WCM strategies to ensure its viability and expansion.

The primary objective of this study is to make a scholarly contribution to the existing body of literature WCM and its impact on company performance. Specifically, this research aims to investigate the relationship between WCM and firm performance within the specific context of private agri-business businesses. The agricultural business sector holds considerable significance in several countries, with private agri-business enterprises assuming a prominent position within this sector. The objective of this study is to assess the potential for enhanced performance among private agriculture firms through effective working capital management. The objective of this study is to provide a comprehensive understanding of the relationship between WCM and firm performance. This will be achieved by examining the impact of WCM on several financial performance metrics. The results of this study could potentially provide valuable insights for private agriculture firms, aiding them in effectively managing their working capital and improving their overall performance.

1.2 Statement of the problem

One of the primary constraints encountered by private agri-business enterprises in Ghana is WCM (Ferreira et al., 2022). The use of efficient WCM practices has significant importance for organizations as it enables them to uphold their liquidity levels, effectively control cash flow, and optimize overall profitability. Nevertheless, Ghanaian private agri-business businesses frequently have constraints when it comes to effectively managing their working capital. These challenges arise from a multitude of variables, including the seasonal nature of agricultural production, the volatility of prices, and the limited availability of financial resources (Nyamekye et al., 2021). Hence, it is imperative to examine the correlation between WCM and performance within the specific setting of private agri-business enterprises in Ghana. These firms hold considerable influence over the advancement of the agricultural sector

and the overall economy. Consequently, the difficulties they encounter in effectively managing their working capital have the potential to impact their performance and long-term viability (Awunyo-Vitor and Sackey, 2018).

In light of the increasing significance of private agri-business businesses within the agri-business sector, there exists a dearth of research that specifically examines this sector within the framework of WCM and performance. Prior studies have mostly examined the relationship between WCM and overall company performance, neglecting to include the distinctive characteristics of the private agricultural industry. Ndiaye et al. (2018) conducted a study that examined the impact of working capital management on firm profitability within a developing market. However, their research did not specifically focus on the private agricultural sector. In a study conducted by Sensini (2020), a similar analysis was conducted, with the exception of private agri-business organizations, to assess the influence of working capital management (WCM) on the performance of small and medium-sized enterprises (SMEs) in Italy. Anton and Afloarei Nucu (2020) conducted a study to examine the influence of working capital management on the profitability of enterprises in Poland. Similarly, Alvarez et al. (2021) explored the relationship between working capital management and earnings in emerging countries. These studies provide valuable insights into the relationship between WCM and corporate success under different situations. However, they do not address the existing research gap in the private agricultural sector.

Moreover, several scholarly investigations have explored the impact of working capital management on the performance of small and medium scale enterprises (SMEs) that are publicly listed (Anton et al., 2020). Additionally, other studies have examined the relationship between working capital management and financial distress among firms (Habib and Kayani,

2022). Furthermore, there have been investigations into the influence of working capital management on firm performance in specific countries, such as the United Kingdom (Gonçalves et al., 2018) and Jordan (Almomani et al., 2021). However, none of these studies specifically focus on private agri-business enterprises, which include unique characteristics that could potentially influence the relationship between WCM and business performance. Moreover, the current investigation on the influence of WCM on firm performance exhibits conflicting findings. Various studies have shown divergent results, with certain research indicating a positive correlation between working capital management (WCM) and firm performance, while others have identified a negative or insignificant relationship. Hence, additional research is necessary to examine the underlying relationship and the possible factors that influence it.

The objective of this study is to enhance researchers' comprehension of the correlation between WCM and financial performance in the context of private agri-business enterprises in Ghana. This study aims to provide valuable insights for commercial agri-business organizations, governments, and other stakeholders on strategies to enhance the efficiency and effectiveness of waste and resource management practices in the agricultural sector.

1.3 Objectives of the study

1. The objective of this study is to examine the prevailing working capital management strategies employed by private agri-business businesses in Ghana.
2. The objective of this study is to analyze the influence of WCM on the financial performance of privately-owned agricultural businesses in Ghana.

3. The objective of this study is to examine the many elements that impact the efficacy of WCM among privately-owned agricultural businesses in Ghana.

1.4 Research questions

1. What are the prevailing working capital management strategies employed by private agri-business businesses in Ghana?
2. What is the influence of working capital management on the financial performance of private agri-business businesses in Ghana?
3. What are the determinants that impact the efficacy of working capital management in privately-owned agricultural businesses in Ghana?

1.5 Overview of research methodology

The present inquiry necessitates the application of a quantitative research approach. This phenomenon can be attributed to the fact that The utilization of a quantitative research design facilitates an impartial and methodical methodology for the gathering and examination of data. Statistical approaches can be employed by researchers to examine the data, so yielding a representation of the results that is both unbiased and accurate. Furthermore, employing a quantitative research methodology facilitates the accurate quantification of the variables under investigation. This study aims to assess the quantifiable measures of working capital management (WCM) efficiency and financial performance among private agri-business businesses in Ghana.

The study will utilize a cross-sectional survey research approach to collect data from a sample of privately-owned agri-business businesses in Ghana. Data on the variables of interest will be collected by the administration of a standardized questionnaire during the survey. The study will encompass the entire population of private agri-business businesses in Ghana. This would encompass enterprises involved in several agricultural pursuits, including the cultivation of crops, the raising of cattle, and the practice of aquaculture. The research will employ a purposive sample methodology to identify and choose private agri-business businesses that are currently operational in Ghana. The sample size calculation table developed by Krejcie and Morgan will be utilized to determine the appropriate sample size for the investigation. The study will involve the selection of a sample size consisting of 100 private agri-business businesses.

The study will gather primary data through the administration of a questionnaire specifically developed to get information regarding the existing working capital management (WCM) practices of firms, their financial performance, and the factors that influence the effectiveness of WCM. To conduct data analysis, a combination of descriptive and inferential statistical approaches will be employed. The data will be summarized using descriptive statistics such as means, standard deviations, and frequencies. The application of multiple regression analysis will be employed to investigate the relationship between the dependent variables and the independent factors. In order to fulfill this objective, the statistical software SPSS will be utilized. The present inquiry necessitates the application of a quantitative research approach. This phenomenon can be attributed to the fact that utilization of a quantitative research design facilitates an impartial and methodical methodology for the gathering and examination of data. Statistical approaches can be employed by researchers to examine the data, yielding representation of the results that is both unbiased and accurate. Furthermore, employing a quantitative research methodology facilitates the accurate

quantification of the variables under investigation. This study aims to assess the quantifiable measures of working capital management (WCM) efficiency and financial performance among private agri-business businesses in Ghana.

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1.6 Importance of the study

The study on the effectiveness of WCM and performance of private agri-business firms in Ghana is important for several reasons:

This research will add to the body of information on the topic of WCM and the economic success of private agribusinesses. The study's results will provide light on the connection between these two factors, therefore informing future studies.

Practical implications: The study will provide practical implications for private agri-business firms in Ghana. The findings can help firms to understand the importance of WCM in enhancing financial performance and identify strategies for improving WCM efficiency.

Policy implications: The study can have policy implications for the government of Ghana. The findings can inform policies aimed at promoting the growth of private agri-business firms in Ghana, which can contribute to the country's economic development.

Stakeholder engagement: The research can engage stakeholders such as private agri-business firms, legislators, and investors in talks about the relevance of WCM and financial performance. The findings can help Ghana's private agribusiness industry implement best practices in WCM and improve financial performance.

Academic relevance: The study can contribute to the academic discourse on WCM in the private agri-business sector. The findings can provide a basis for further research on this topic, which can enhance academic knowledge and understanding of WCM and financial performance in the private agri-business sector.

1.7 Limitations of the study

There are certain to be flaws in this research, the same as in any other. It's possible that this study's sample size will be small because of a lack of funding. The reason is that there are several agribusinesses in Ghana, however, locating them was a challenge. A larger sample size may provide more accurate results, but this may not be feasible for this study.

There is a possibility of bias in the data collected. Respondents may be reluctant to disclose certain information, or they may provide inaccurate responses due to misunderstanding or lack of knowledge.

1.8 Organisation of the study

The research is broken down into the following five sections:

Chapter 1 - Introduction: The importance of the study, research aims, and problem statement is outlined in this section. In addition, the study's context, questions, and objectives is outlined.

Chapter 2 - Literature Review: The second chapter present a critical review of the literature relevant to the study. The literature review also highlights previous studies on the topic, identify gaps in the literature, and provide a conceptual framework for the study. In addition, relevant theories underpinning the study also discussed in this chapter.

Chapter 3 - Research Methodology: This chapter describe the research methodology used in the study, including the research design, population and sample, data collection instruments, data analysis methods, and ethical considerations. It also describes the limitations of the study and strategies to minimize these limitations.

Chapter 4 - Data Analysis and Findings: The findings from the interviews, surveys, and document analysis are presented in the fourth chapter. This chapter also address the efficacy of WCM in Agri-businesses and analyse the study's results in light of the research questions and goals.

Chapter 5 - Conclusion and Recommendations: The final chapter provides a summary of the study, a discussion of the main findings, and conclusions drawn from the study. The chapter also provide recommendations for future research, as well as recommendations for practice and policy based on the research findings.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

You may think of the literature review as having four parts. The first part, entitled "Conceptual Review," discusses the theories and ideas that form the basis of WCM. In the second part, we'll look at the hypotheses that attempt to explain the connection between WCM and financial success. In the third part, referred to as the empirical literature, a review of the previous research that has been conducted to explore the effect of WCM on the financial performance of private agri-business businesses in Ghana is presented. The review will focus on the methods used, the variables examined, and the findings of the studies. Finally, the hypothesis section will present a hypothesis based on the existing literature, which will guide the research study.

2.1 Conceptual Review.

2.1.1 Working Capital Management (WCM)

Proper WCM involves monitoring and controlling a company's short-term assets and liabilities to reduce the likelihood of defaulting on short-term obligations and avoid overinvestment. Effective WCM has the potential to improve a company's bottom line (Afrifa and Tingbani, 2018). WCM practises are the methods and procedures an organisation employs to keep track of its current assets and liabilities. Effective WCM entails managing cash, inventories, accounts receivable, and accounts payable to guarantee profitability while satisfying short-term debt commitments. The aim is to maintain sufficient liquidity to fulfil short-term commitments (Akbar et al, 2021). Good WCM practices involve balancing the need for cash with the need to invest in the business and managing risk effectively. This can involve techniques such as optimizing inventory levels, managing credit

policies, and negotiating payment terms with suppliers and customers. Effective WCM practices are essential for the financial health and stability of a company, and can impact its profitability, liquidity, and solvency (Almomani et al, 2021).

2.1.1.1 Inventory Management

Inventory management, as described by Alvarez et al. (2021), involves maintaining optimal levels of input materials or production resources to prevent production disruptions and reduce operational costs while maintaining operational efficiency. Inventory management includes inventory planning, organization, control, and direction. In other words, inventory management is concerned with the activities associated with the movement of inventory into and out of the firm (Deloitte, 2018). Inventory includes supplies, raw materials, work-in-process items, and finished commodities. These inventory components are critical for all corporate operations since they rely on account receivables and inventory levels substantially on sales, whereas receivables expand after sales have been completed, inventory must be acquired ahead of time of sales (Anton and Afloarei Nucu, 2020). Awunyo-Vitor and Sackey (2018) posit that keeping too little inventory increases ordering costs, and the business might avoid profitable sales, reducing goodwill and lowering future sales. As a result, it is critical to retain sufficient stocks on hand to meet consumer needs, which lowers the cost of products sold and increases the net profit margin.

Inventory policy is a crucial component of WCM, as it directly affects a company's cash flow and profitability. A company's inventory policy determines the level of inventory it maintains, how quickly it replenishes its inventory, and how it manages its excess inventory (Gonçalves et al, 2018). An effective inventory policy can help a company optimize its inventory levels to satisfy consumer demand while avoiding expenses related to inventory retention. Profitability and cash flow might benefit from this since having too much stock can cause unnecessary expenses like

having to pay to store it. However, a business's bottom line might take a hit if its inventory strategy is poorly conceived, resulting in waste, stockouts, and even write-offs. Stock-outs may result in missed sales and unhappy consumers, while excess inventory can tie up cash, raise storage expenses, and cause obsolescence (Habib and Kayani, 2022).

2.1.1.2 Accounts Receivable Management

Account receivables are assets that reflect sums owing to the firm as a consequence of the normal course of business sale of products or services (Lessambo, 2022). A company's overdue bills are managed and paid on time using Accounts Receivable Management (ARM) (Akomeah and Frimpong, 2019). It is an essential aspect of financial management as it impacts a company's cash flow and profitability. Effective ARM involves the implementation of policies and procedures that ensure timely payments from customers while minimizing the risk of bad debt. The ARM process includes credit evaluation, invoicing, payment collection, monitoring of outstanding invoices, and debt collection (Lessambo, 2022). According to Sensini (2020), effective ARM can lead to improved cash flow, reduced bad debt, and increased profitability.

The initial step in managing accounts receivable is to select the appropriate credit policy for the company (Singh, Singh, and Mishra, 2021). The credit policy determines the terms and conditions of credit sales, including credit period, credit limit, and discount policies. A recent investigation conducted by Luoma, I. (2021) shown that organisations that possess a clearly delineated credit policy exhibit a less likelihood of encountering delinquent debts and experience an expedited process of converting their cash. Another crucial facet of ARM involves leveraging technology to automate and optimise the process. According to Rizvi et al. (2020), the use of technology such as accounting software and electronic invoicing can lead to improved accuracy, efficiency, and timely payment collection. Nonetheless, the organisation must have a system in place for

monitoring and regulating compliance with loan conditions. It is usually necessary to take corrective action regarding different credit rules, and having a strong receivables management system is the only method to determine whether the situation is appropriate and under control.

Numerous studies have examined how ARM affects a company's bottom line. Companies with effective ARM have a lower cost of capital, a greater return on assets, and a higher market value, according to research by El Ghouli et al. (2018). In a similar vein, a research that was conducted by Lazaridis and Tryfonidis (2018) found that businesses that had shorter average collecting periods had better levels of profitability and liquidity. Accounts receivable management was also studied by Masri and Abdulla (2018), who looked at how it affected the bottom lines of textile companies in Pakistan. The results of the study suggest that firms have the potential to enhance their profitability through improved accounts receivable management. In a study conducted by Altaf and Shah (2018), an examination was undertaken to explore the impact of accounts receivable management on the liquidity of firms in Pakistan. The findings of the study indicated a positive correlation between robust accounts receivable management and elevated liquidity ratios in organizations. Furthermore, a study conducted by Karada (2018) examined the relationship between receivables management and working capital management in the Iranian car business. According to the research, the efficient handling of accounts receivable has a positive impact on working capital management (WCM).

2.1.1.3 Accounts Payable Management

Management of a company's invoices and payments to vendors and suppliers is known as Accounts Payable Management (APM) (Abdullahi et al, 2020). Effective APM can help a company to optimize its cash flow and maintain good relationships with its suppliers. APM involves the

implementation of policies and procedures that ensure timely payment to vendors while minimizing the risk of late payments, penalties, and damaged relationships. The APM process includes invoice processing, payment approval, payment schedule, and vendor management. According to Panda et al. (2020), effective APM can lead to improved cash flow, reduced penalties, and increased goodwill with vendors.

Use of technology to automate and simplify APM is a major aspect affecting APM. Technology, such as accounting software and electronic invoicing, may increase precision, efficiency, and prompt payment to suppliers, as noted by Nguyen et al. (2020). Companies with efficient APM have a lower cost of capital, a greater return on assets, and a higher market value, according to research by Ndiaye et al. (2018). In a similar vein, Lazaridis and Tryfonidis (2018) find that businesses with shorter average payment periods are more successful financially.

However, effective APM can be challenging for companies, especially those with a large number of vendors and complex payment terms. A study by Panigrahi and Sahu (2016) found that companies face challenges such as manual processing, lack of visibility into vendor data, and disputes with vendors.

2.1.1.4 Cash Conversion Cycle

The measurement of a company's capacity to convert its investments in inventory and other assets into cash flow from sales can be assessed through the utilization of a financial indicator known as the cash conversion cycle (CCC), as described by Karada (2018). Afrifa and Tingbani (2018) propose that the calculation of the Cash Conversion Cycle (CCC) involves aggregating the durations required to transform cash outflows into cash inflows from inventories, accounts receivable, and accounts payable. In order to determine the Cash Conversion Cycle (CCC), it is

necessary to aggregate the number of days inventory is held and the number of days it takes to collect accounts receivable, and afterwards subtract the number of days it takes to pay accounts payable. A reduced cash conversion cycle (CCC) signifies enhanced liquidity and financial stability for a corporation, since it indicates the ability to efficiently transform investments into cash flow. The Cash Conversion Cycle (CCC) holds significant value for organizations as it serves as a quantitative measure of the working capital necessary to sustain the company's operational activities (Boisjoly et al., 2020). A lengthier cash conversion cycle (CCC) may suggest that a company is allocating a greater amount of its cash resources towards its operational activities, perhaps resulting in liquidity challenges and impeding its potential for expansion.

2.1.2 Working capital management and Firm performance

The effective management of working capital (WCM), an essential component of financial management, has the potential to positively influence a company's profitability. Numerous empirical studies have examined the relationship between working capital management (WCM) and economic prosperity. The study conducted by Afrifa and Tingbani (2018) reveals that the implementation of efficient working capital management (WCM) practices has a favorable influence on the financial performance of small and medium scale enterprises (SMEs), specifically in terms of profitability and cash flow. Almomani et al. (2021) conducted a study in Jordan that explored the relationship between WCM and economic performance. The research revealed a significant positive correlation between working capital management (WCM) and financial performance, indicating that effective WCM practices have the potential to enhance a firm's profitability and liquidity.

In a separate study, Alvarez et al. (2021) investigated the correlation between working capital management (WCM) and profitability within the context of an emerging economy. The study revealed that the implementation of efficient working capital management (WCM) practices has a positive impact on profitability. This suggests that maintaining an optimal level of working capital might lead to enhanced financial performance. In contrast, the study conducted by Anton and Afloarei Nucu (2020) examined the relationship between working capital management (WCM) and business profitability in Polish-listed firms, revealing contradictory results. The findings of the study revealed that the impact of working capital management (WCM) on a firm's profitability exhibited heterogeneity across different industrial sectors and company sizes.

Empirical evidence substantiates the assertion that effective working capital management (WCM) exerts a positive impact on a firm's financial performance. However, it is important to note that this relationship may exhibit variation depending on factors such as the specific industrial sector, the size of the organization, and the prevailing economic conditions. Hence, it is imperative for organizations to effectively administer their working capital in order to optimize their financial performance.

2.2 Theoretical Review.

There are numerous finance theories, however, the two that will underpin this study are the Transaction Cost Theory and the trade-off theory.

2.2.1 Transaction Cost Theory

Transaction cost theory is a concept in economics that explains why some transactions occur within the boundaries of a firm, rather than in an open market. The theory was developed by

Ronald Coase in his 1937 article "The Nature of the Firm," and it has since been expanded upon and refined by other economists. Williamson (1975), and Ferris (1981) expanded on it by applying it to corporate transactions. The theory is based on the idea that there are costs associated with making transactions in the marketplace. These costs include search costs, bargaining costs, and monitoring costs (Akbar and Tracogna, 2018). Search costs are the expenses incurred in finding and evaluating potential transaction partners, while bargaining costs refer to the expenses associated with negotiating and agreeing to the terms of a transaction. Monitoring costs, on the other hand, refer to the costs associated with ensuring that the terms of the transaction are being met (Ahluwalia et al, 2020).

This hypothesis proposes that when market uncertainty is high and a company needs a certain important asset, the company would prioritise adopting stock choices. The theory also suggests that the decision to make a transaction within the boundaries of a firm depends on the relative costs of doing so (Roeck et al, 2020). If the transaction costs in the market are high, it may be more efficient to bring the transaction within the firm. However, if the transaction costs within the firm are high, it may be more efficient to conduct the transaction in the market (Schneiberg and Hollingsworth, 2019).

Transaction cost theory has been applied to a variety of industries and settings, from agriculture (Ferreira et al, 2020) to information technology (Ahluwalia et al, 2020). It has been used to explain why firms exist, why some industries are more vertically integrated than others, and why some firms choose to outsource certain activities. According to Schneiberg and Hollingsworth (2019), It is essential to manage payables in order to reduce transactional costs and account for other expenditures. To achieve this goal, businesses must institute payment methods that encourage

invoices to be carried forward and settled monthly rather than paid in full upon receipt of the corresponding products or services.

According to the authors, companies that can pay invoices on a transaction-by-transaction basis are in a better position to ensure efficient cash flows, enabling them to meet their short-term commitments successfully. WCM, according to this idea, maybe crucial in planning and boosting the firm's liquidity level.

However, critics of this theory claim that it ignores the contextual basis for human behaviours, resulting in an under-socialized view of individual motivation and an over-socialized view of institutional management (DeMiguel et al, 2020). Opportunism assumptions are especially contentious since they presume that everyone involved in a business transaction would be opportunistic.

According to this theory, the management of private agricultural firms should consider the long- and short-term costs of outsourcing cash management services, account receivables, and account payables before deciding to do so (Schneiberg and Hollingsworth, 2019). Thus, this theory was employed to support how different WCM components might impact the financial measurements studied by managers of private agricultural firms.

2.3 Empirical Review

The academic literature presents various alternate hypotheses regarding the association between working capital and company success. The following are some of the topics that will be explored in the subsequent sections. In their study, Habib and Kayani (2022) examine the correlation between WCM efficiency and financial hardship among companies operating inside the United Arab Emirates (UAE). The researchers utilize a sample of 92 enterprises that are listed on the stock exchange of the United Arab Emirates. They employ panel data analysis methods to investigate

the influence of working capital management efficiency on the occurrence of financial hardship. The research reveals that the inadequate management of working capital has a notable and favorable effect on the probability of encountering financial hardship. The study reveals that companies exhibiting lower levels of working capital efficiency are at a higher risk of encountering financial trouble, as indicated by the Altman Z-score. The study conducted by Alrahamneh, Chu, and Hong in 2020 aimed to investigate the correlation between WCM and the performance of firms. The link in question was examined by the writers through an analysis of different variables that either mediate or moderate the relationship. These variables were selected based on the authors' special interests, including factors such as the operating market, country-specific effects, methodological estimate methodologies, and the utilization of multiple performance assessment measures. The authors placed emphasis on the overarching effectiveness of the WCM framework as the primary determinant of performance, rather than focusing on particular processes.

The study conducted by Ren et al. (2019) investigates the correlation between WCM and the performance of Chinese enterprises. Based on an analysis of data obtained from the Shanghai Stock Exchange and Shenzhen Stock Exchange spanning the period from 2008 to 2017, the present study reveals a positive association between superior financial performance and some key financial indicators. Specifically, enterprises exhibiting a shorter cash conversion cycle, smaller accounts receivable, and larger accounts payable demonstrate improved financial performance. Nevertheless, it is important to note that the ideal amount of WCM is subject to variation depending on factors such as industry, company size, and ownership structure. The findings indicate that Chinese enterprises have the potential to enhance their financial performance through the implementation of suitable WCM strategies.

The study conducted by Senan et al. (2021) examined the impact of WCM factors on the performance of commercial banks in India. By employing various static models such as GMM, pooling, fixed, and random effects models, and analyzing a balanced panel dataset encompassing 98 Indian banks over the period of 2008 to 2018, the researchers have identified net profit margin, profit after tax, monetary policy, and working capital cycle as the primary factors influencing the return on assets (ROA) performance of commercial banks in India. Additionally, the findings pertaining to the working capital indicate that the current ratio, asset size, net profit margin ratio, and return on capital employees exert a significant positive impact on the return on equity (ROE).

In their study, Braimah et al. (2021) conducted an investigation into the influence of WCM on the performance of Small and Medium Enterprises (SMEs) in Ghana. The researchers evaluated performance by utilizing three indicators of profitability, namely gross operating profit (GOP), net operating profit (NOP), and return on investment (ROI). Based on an analysis of data collected from 336 small and medium-sized enterprises (SMEs) during a period spanning from 2007 to 2016, the researchers saw several noteworthy findings. Firstly, a positive correlation was identified between accounts payable (AP) and profitability. Secondly, an indirect correlation was observed between both inventory (INV) and cash conversion cycle (CCC) and profitability. Lastly, a curvilinear association in the form of an inverted U-shape was detected between accounts receivable (AR) and profitability.

In a study conducted by Munene (2018), an examination was made on the correlation between accounts receivable management and the financial performance of Embu Water and Sanitation Company Limited in Embu County, Kenya. This study was driven by a set of independent parameters, namely the inventory turnover duration, average payment period, cash conversion period, and average collection period. The evaluation of financial performance was conducted by

utilizing two key metrics, namely Return on Equity (ROE) and Return on Investment (ROI). The research design employed in this study was descriptive in nature. The findings of the study indicate a negative correlation between the duration of inventory turnover and return on equity (ROE) for companies. Consequently, the augmentation of stock turnover has a detrimental effect on profitability, but a reduction in inventory days has a positive impact on profitability. Additionally, the study revealed a positive correlation between the duration of daily collecting and the current ratio with the return on assets (ROA).

In this study, Gonçalves et al. (2018) investigate the influence of WCM on the financial performance of firms across various economic cycles, drawing on empirical data from the United Kingdom. This study utilizes a sample of enterprises in the United Kingdom spanning the years 2010 to 2015. It applies panel data analysis to examine the correlation between WCM and profitability. The findings indicate that WCM has a statistically significant and favorable effect on firm profitability, regardless of whether the economy is experiencing a recession or an expansionary phase. This implies that companies have the potential to enhance their profitability by efficient management of their working capital, irrespective of the prevailing economic conditions.

Simatupang et al. (2019) conducted a study to examine the factors influencing capital structures, drawing upon the Pecking Order Theory and Trade-off Theory. The study incorporates many aspects derived from existing theories, including as profitability, sales growth, non-debt tax shield, asset tangibility, and financing excess, in order to examine their impact on the capital structure. The research employs a quantitative approach and selects a sample of 34 industrial companies listed on the Indonesia Stock Exchange between the years 2012 and 2016. The capital structure is

positively influenced by profitability and sales growth, while it is negatively influenced by factors such as non-debt tax shield, asset tangibility, and financing excess.

In a distinct study, Sensini (2020) examines the correlation between WCM and performance within the context of Italian small and medium-sized enterprises (SMEs). The research utilizes a quantitative approach and examines a sample of 209 small and medium-sized enterprises (SMEs) in Italy across several industries during the period from 2013 to 2017. This study examines the impact of WCM on financial performance indicators such as profitability, liquidity, and solvency. The results suggest that the implementation of efficient WCM practices has a positive impact on financial performance indicators such as profitability, liquidity, and solvency. The findings indicate that small and medium-sized businesses (SMBs) might benefit from placing greater emphasis on improving their WCM practices, as doing so has the potential to boost their financial performance.

The study conducted by Panda et al. (2021) examines the impact of macroeconomic factors on the relationship between WCM and firm profitability within the context of small and medium-sized companies (SMEs) in India. The study employs a quantitative research approach and examines a sample of 340 small and medium-sized enterprises (SMEs) in India spanning the years 2012 to 2019. This study employs regression analysis to investigate the effects of working capital management (WCM) on profitability, while also considering the potential moderating influence of macroeconomic variables. The results indicate that the effectiveness of WCM has a favorable influence on the profitability of companies. Moreover, this relationship is influenced by macroeconomic factors such as inflation, interest rates, and economic growth.

The study conducted by Almomani et al. (2018) examines the correlation between WCM and the financial performance of companies in Jordan. The study utilizes a sample including 75 enterprises

that were listed on the Amman Stock Exchange (ASE) during the years 2014 and 2019. The research utilizes a range of statistical methodologies, including descriptive statistics, Pearson correlation, and panel data regression analysis. The results indicate that there is a negative relationship between the CCC and profitability measures such as ROA and ROE. Furthermore, the findings indicate a favorable correlation between the cash conversion cycle (CCC) and liquidity indicators, specifically the current ratio (CR) and the quick ratio (QR). Furthermore, the research reveals a noteworthy positive correlation between inventory turnover (IT) and indicators of profitability, whereas account receivable turnover (ART) exhibits a detrimental effect on profitability measurements. In conclusion, the study establishes that working capital management (WCM) has a substantial impact on the financial performance of enterprises in Jordan. Consequently, it is recommended that managers prioritize the maintenance of an optimal working capital level in order to enhance their financial performance.

The study conducted by Fernández-López et al. (2020) examines the correlation between WCM and profitability within the context of cheese-producing firms. This study employs a sample of 80 Spanish cheese-producing enterprises and examines their financial accounts from 2012 to 2017. The authors employ a panel data analytic methodology to examine the relationship between WCM and firms' profitability. Their findings indicate a statistically significant influence of WCM on firms' financial performance. The findings of the study indicate a negative relationship between a prolonged cash conversion cycle and profitability, suggesting that companies with longer cash conversion cycles tend to have lower levels of profitability. Conversely, the study also highlights that improved management of accounts receivable and accounts payable might contribute to enhanced profitability. This study offers valuable insights for cheese-producing companies to

enhance their working capital management (WCM) practices and thereby enhance their financial performance.

The study conducted by Anton and Afloarei Nucu (2020) seeks to investigate the influence of WCM on the profitability of organizations, utilizing empirical data from publicly listed companies in Poland. The researchers employ panel data regression analysis as a methodological approach to examine the association between WCM and profitability. This analysis takes into account many firm-specific factors, including size, leverage, and industry, in order to adjust for their potential influence on the relationship. The findings of this study demonstrate that the WCM has a statistically significant and positive influence on company profitability. These results suggest that companies that effectively handle their working capital are more likely to achieve higher levels of profitability compared to those that do not prioritize efficient WCM practices. The researchers also observe that the influence of working capital management on profitability differs across various industries.

In his study, Moussa (2018) investigates the correlation between WCM and business performance, specifically focusing on the value aspect within the setting of Egyptian firms. This study utilizes a sample of 104 publicly traded companies throughout the period of 2007-2016. The research employs panel data analysis to examine the effects of different components of working capital management (namely, cash conversion cycle, inventory turnover, and accounts receivable turnover) on the profitability, liquidity, and market value of these firms. The results of the study indicate that the proficient administration of working capital has a beneficial influence on the financial performance and market valuation of companies. The profitability of a company is notably affected in a negative manner by both the cash conversion cycle and inventory turnover. Conversely, the liquidity of a company is positively influenced by the account receivables

turnover. Furthermore, the research presents empirical findings that demonstrate the substantial influence of WCM components on the market valuation of companies.

The study conducted by Zahadi et al. (2021) aims to discover and categorise the measuring indices for financial resilience in enterprises using an intuitive fuzzy approach. The study's findings revealed a statistically significant relationship between redundancy and visibility of financial resiliency. In 2022, Mundi and Vashist did a study to investigate the relationship between cognitive ability and financial resilience among single parents from the millennial generation. The study assesses financial resilience by considering factors such as economic resources, financial resources, financial literacy and behaviour, and social capital. The researchers discover a notable influence of the cognitive capacities of single parents on their ability to withstand financial challenges.

In their empirical study, Gupta et al. (2023) examined the capabilities of Artificial Intelligence (AI) and Blockchain Technology (BT) to determine their impact on the financial resilience of a supply chain. The paper examines how the environmental dynamic affects the link between AI and BT, which in turn contributes to the financial resilience of supply chains. The results suggest that blockchain technology is more effective than artificial intelligence in enhancing the financial stability of a supply chain, particularly when influenced by changes in the environment.

2.4 Hypothesis and conceptual Framework

Numerous studies have discovered evidence of a favourable association between WCM and financial success. Panigrahi and Vachhani (2021) discovered that companies with superior WCM had higher profitability ratios, including return on assets (ROA) and return on equity (ROE). WCM was also shown to significantly positively correlate with profitability (as assessed by return on

investment and net profit margin) by Amponsah-Kwatiah and Asiamah (2021). Another study by Daniswara et al. (2020) found that firms with lower levels of accounts receivable and inventory had higher returns on investment (ROI) and lower cost of goods sold (COGS), indicating the importance of efficient WCM in improving financial performance.

Both Sensini (2020) and Panda, et al. (2021) showed that improved WCM linked to better financial performance in terms of profitability, liquidity, and solvency for businesses. Companies having a quicker cash conversion cycle were shown to be more profitable and liquid by Lazaridis and Tryfonidis (2018). Similarly, Nguyen et al. (2020) discovered that businesses with well-managed AR and AP had a lower cost of capital and a better market value. These results provide support for the alternative hypothesis, which holds that efficient management of working capital components may have a beneficial influence on a company's financial success.

H1: Efficient working capital management has a positive impact on financial performance

Empirical evidence supports the hypothesis that efficient inventory management positively influences financial performance. An example of such research is Nyamekye et al(2020) .'s analysis of how SMEs in Ghana fared financially after improving their WCM. The results suggested that inventory management contributed positively to financial success. Similarly, Atnafu and Balda (2018) discovered a correlation between inventory management and financial success in Chinese manufacturing companies.

In addition, Muchaendepi et al. (2019) investigated the correlation between inventory management and financial performance in Turkish manufacturing enterprises. The research indicated that companies with effective inventory management techniques had better financial performance than

those with ineffective inventory management strategies. In addition, Karim, Nawawi, and Salin (2018) examined the link between inventory management and financial performance in Malaysian manufacturing companies. The findings indicated that inventory turnover and inventory holding duration had a beneficial impact on financial performance. There is evidence in the empirical literature that good inventory management favorably influences the financial performance of organizations, which leads to the hypothesis, that:

H2: Effective inventory management positively affects the financial performance of firms.

Companies that manage their accounts receivables effectively tend to have better financial performance in terms of liquidity, profitability, and market value. For example, a study by Akomeah, and Frimpong (2019) found that companies with a lower average collection period (an indicator of effective ARM) had higher profitability and liquidity. Similarly, a study by El Ghoul et al. (2018) found that companies with effective accounts receivable management had a lower cost of capital and higher market value. Several research has also shown a correlation between ARMs and financial success. According to 2018 research by Altaf and Shah, firms with superior WCM (which includes ARM) have more profitability and liquidity. The use of ARM is one component of effective WCM, which another research by Karada (2018) also showed to be correlated with improved profitability, liquidity, and solvency.

By managing their accounts receivables effectively, companies can improve their liquidity, reduce their cost of capital, and increase their profitability, which can ultimately lead to higher market value. It is therefore hypothesized that:

H3: There is a positive relationship between accounts receivables management and firm financial performance.

Studies show that the way accounts payable are handled may have a major effect on a company's bottom line. According to the notion, companies may boost their bottom lines by better managing their accounts payable. Effective management of accounts payable can help firms to reduce costs, increase liquidity, and improve profitability. Furthermore, timely payment of accounts payable can help firms to maintain good relationships with their suppliers and enhance their reputation in the market. Therefore, the hypothesis suggests that:

H4: there is a positive relationship between accounts payable management and financial performance of firms.



Conceptual Framework

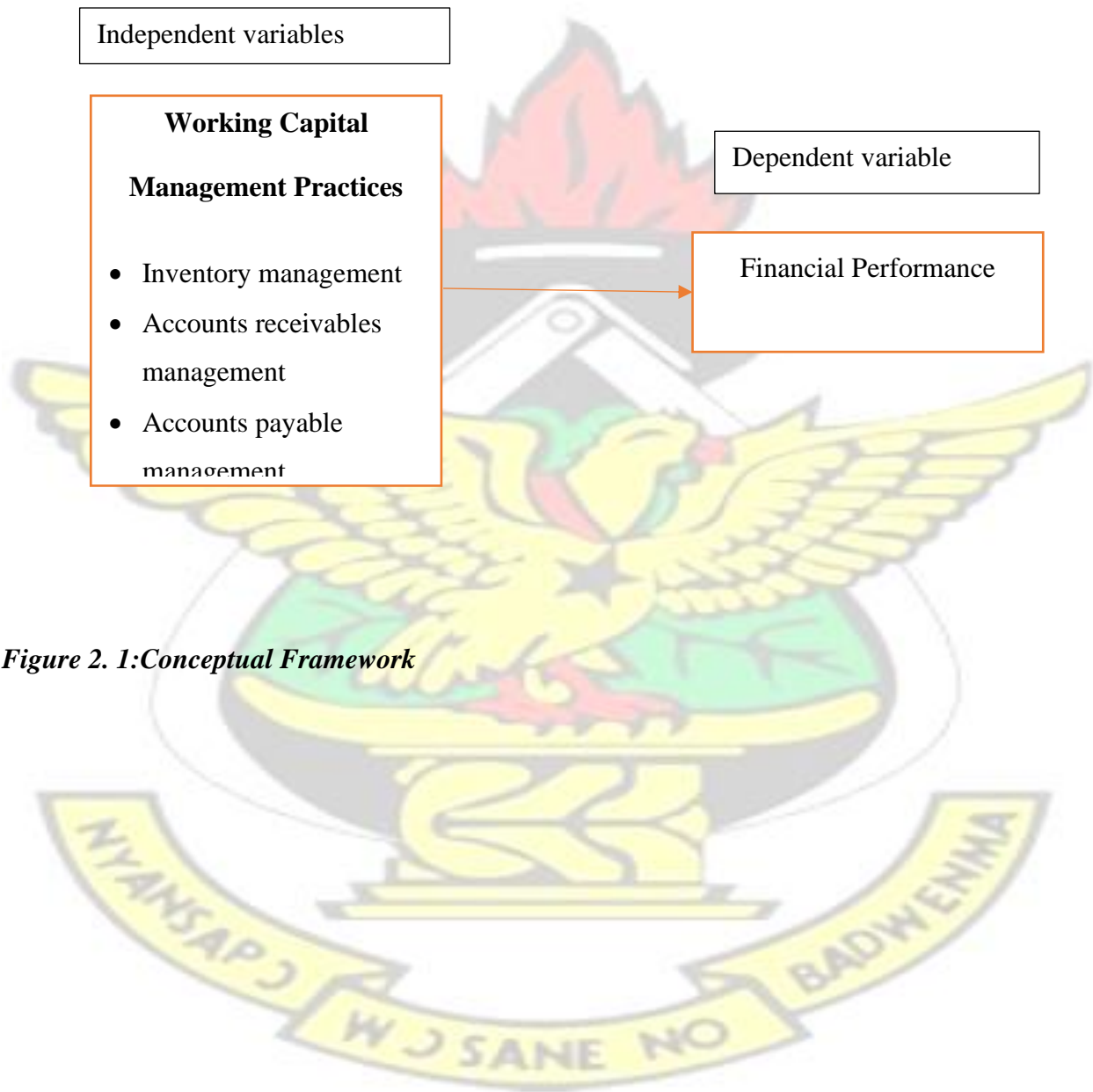


Figure 2. 1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

Data collecting, data cleaning, and data analysis methods, as well as particular analytical tools, are summarised in this chapter. Research methods, study subjects, sample sizes, statistical analyses, confidence levels, validity evidence, and chapter summaries are all covered.

3.1 Research Approach

The sampling strategies, the development of research equipment, and the analysis in this study will all be guided by a quantitative approach. We opted for a quantitative methodology since it generates more reliable and generalizable findings (Raheman & Nasr, 2007). Aside from that, it is great for assessing and confirming already existing notions about how and why events occur by testing hypotheses prepared before data collection. This may be done by evaluating and checking previously known conceptions about how and why events occur. Quantitative research is often thought of as a logical method of inquiry (Li, Miu, & Ye, 2011).

3.2 Research design

Descriptive statistics and an after-the-fact analysis were used for this investigation. According to Basu (2013) and Shah et al. (2013), an Ex post facto study aims to establish feasible linkages by evaluating a present condition or state of affairs and then going back in time for plausible contributory factors. The ex post facto design is determined to be acceptable for this study since it is non-experimental and will analyse causal relationships between the dependent variable and independent variable (Chen and Yi, 2014). This design intends to demonstrate the link between variables, i.e., how one variable impacts another (Osamwonyi and Egbide, 2014).

The technique is used in the quantitative research because it analyses a cross-section of the population to provide a numerical representation of beliefs, norms, and preferences.

3.2.1 Population of the Study

The private agribusiness sector in Ghana is the focus of this research. Bhat and Darzi (2016) state that in order to answer research questions and collect data, the researcher must first identify the unit of analysis, which might be a person, an organisation, or a group. Given that the factors of interest are organisational in nature, the research will focus on the owners and senior managers of private agribusiness enterprises in Ghana.

3.2.2 Sample Size and Sampling Technique

There were 150 working adults that participated in this survey. Research from the past has shown that you need a sample size that's at least ten (10) times the number of hypotheses or correlations with the endogenous variable (Hair et al., 2011; Shamsuddin, 2017). Therefore, 108 participants were selected for the research using the technique developed by Krejcie and Morgan (1970). The following formula, developed by Krejcie and Morgan (1970), is used to determine sample size:

$$S = \frac{X^2 NP (1-P)}{(d^2 (N-1) + X^2 P (1-P))} \quad (3.1)$$

Where s = required sample size

X² = the table value of chi-square for one degree of freedom at the desired confidence level of 0.05

N = the population size

P = the population proportion (assumed to be .05 since this would provide the maximum sample size)

d = the degree of accuracy expressed as a proportion (.05)

In quantitative methods of inquiry, larger sample sizes are often recommended by researchers (eg. Hair et al. 2018, 2011; Malhotra and Birks, 2007) to reduce sampling error. Sekaran and Bougie (2019) argued that taking a larger sample size from a population increases the chances of sample means approaching normal distribution. Hair et al. (2018) also suggested that the minimum sample size required for Structural Equation Modelling (SEM) technique is 100 or more and must represent the study population.

These scholars argue that employing larger sample sizes increases the chances of mean, standard deviation, percentages, and other statistics reflected in the actual estimates of the population. Based on the arguments from these scholars, the researcher decided to increase the sample size by 50% for the survey (Yusuf and Abdul-Kahar, 2019) to make room for anticipated low response rates. Therefore, to achieve a high accuracy rate, the current study employed a larger sample size by collecting data from a total of 154 respondents in the study.

Finally, purposive sampling was employed to select respondent based on their knowledge on effectiveness of WCM and performance of private agri-business firms.

3.3 Sources of Data

Considering the nature of this study, primary data is more suitable to be able to test the hypotheses proposed in Chapter two (2). The choice of primary data is justified by the quest to gather first-hand information on the views of top managers of the private agri-business firms in Ghana, i.e., to investigate capital management practices on the performance of private agri-business firms in Ghana. Data used in this study was therefore gathered using a well-structured questionnaire.

3.4 Method of Data Collection

Due to the research's aim and goal of quantitatively assessing the interrelationships between variables, a survey questionnaire strategy was used for data collecting in this study. To assess the

study's assumptions, the researcher creates a survey measuring all study variables using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This research adapts questions from previous relevant studies (Ahmed and Ahmed, 2020; Yusuf and Abdul-Kahar, 2019) that have been validated and verified for dependability such that they apply to Ghana. Because Likert scale questions are straightforward for respondents to answer, as well as convenient for the researcher during data processing, and because they provide dependable and quantitative findings, they were used for all of this study's measurements.

3.4.1 Method of Data Analysis

As a quantitative study, different quantitative techniques were utilized to analyse the data to achieve the objective specified in chapter one. After data was collected, it was compiled in Excel for examination. A few incomplete questionnaires were discarded as a result of the examination. Both Statistical Package for the Social Sciences (SPSS) version 26.0 and Amos were utilized in the analysis. SPSS was utilized for analyses involving frequencies, means, standard deviations, correlation, and exploratory factor analysis. In this work, Amos was utilized for Confirmatory Factor analysis, Structural Model evaluation, and other model fit indices.

3.4.2 Model Specification

Analysis of regression was used to establish the determinants of the outcome variable (Financial performance) and inventory management, account receivable management and account payable management as independent variables. Moreover, ordinary least square (OLS) was used to estimate parameters by minimizing the squared discrepancies between observed data. The model is presented below (Alvarez et al. 2021).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i \quad (1)$$

Y = predicted variable; α = intercept; β_1, β_2 = the slope; X_1, X_2 = independent variable; ε_i = error term.

3.4.3 Reliability and Validity

This might be seen as the consistency of measurements taken with the same instrument (Babbie & Mouton, 2001) or the dependability of the constructs being measured. When it comes to reliability, one of the primary issues is the internal consistency of the instruments, and when it comes to validity, one of the primary concerns is the presence of mistakes that are either systematic or consistent in the questionnaire. In this situation, the instruments are legitimate and dependable if their Cronbach alpha is more than 0.7. Which it was put to work doing: figuring out how dependable each item was. The tested instruments all exceeded the 0.7 minimal requirement. This proved the study's instruments were reliable.

3.4.4 Ethical Consideration

The participants were provided with comprehensive instructions on how to complete and return the questionnaire. Additionally, the researcher explained the purpose of the study to the individuals and assured them of their privacy. Significant effort was made to gather data from a representative sample.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

Chapter four presents a comprehensive analysis of the data presented, accompanied by a detailed discussion of the data collected using the methodology outlined in the preceding chapter. Descriptive statistics (mean and standard deviations) and inferential statistics (exploratory factor analysis, reliability test, correlation and regression) were used to examine the data. The main findings were further discussed.

4.2 Demographic Characteristics

The demographic data shows that 26.0% of the participants were females while 74.0% were males. Also, 59.1% of the participants were within 18-30 years, 40.3% were within 31-40 years and 0.6% were also within 41-50 years. Again, 56.5% of the participants had bachelor's degrees, 13.0% had diplomas, and 21.4% had master's/Ph.D. certificate, 2.6% had HND, 0.6% had ICAG certificates, 0.6% were professional accountants and 5.2% also had SHS certificates. The data also shows that 9.7% of the participants were account officers, 2.6% were assistant finance officers, 1.3% were budget analysts, 18.8% were business owners, 7.8% were business owners and managers, 6.5% were employees, 1.9% were finance officers, 13.6% were managers, 1.3% were monitoring and evaluation officers, 2.6% were principal finance officers, 9.7% were production managers, 22.7% were project officers, and 1.3% were also warehouse assistants. Also, 82.5% of the participants indicated their firm has been in operation for 1-5 years, 0.6% indicated 11-15 years, 2.6% indicated 16 years and above, and 14.3% also indicated 6-10 years. Also, 15.6% of the participants indicated that their firm has 30-99 employees, 27.9% also indicated their firm has 5-29 employees and 44.2% also indicated their firm has more than 100 employees. Again, 5.8%

of the participants indicated their firm is fully foreign-owned, 82.5% indicated fully locally owned and 11.7% also indicated jointly Ghanaian & foreign-owned.

Table 4. 1 Demographic Characteristics

Variables	Frequency	Percent
<i>Gender</i>		
Female	40	26.0
Male	114	74.0
<i>Age</i>		
18-30 years	91	59.1
31-40 years	62	40.3
41-50 years	1	0.6
<i>Level of Education</i>		
Bachelor Degree	87	56.5
Diploma	20	13.0
Graduate Studies (Master / Ph.D.)	33	21.4
HND	4	2.6
ICAG	1	0.6
Professional Accountant	1	0.6
Senior High School	8	5.2
<i>Your Position in the Firm</i>		
Accounts Officer	15	9.7
Assistant Finance Officer	4	2.6

Budget analyst	2	1.3
Business Owner	29	18.8
Business Owner & Manager	12	7.8
Employee	10	6.5
Finance Officer	3	1.9
Manager	21	13.6
Monitoring and Evaluation Officer	2	1.3
Principal Finance Officer	4	2.6
Production Manager	15	9.7
project officer	33	22.7
Warehouses Assistant	2	1.3
<i>How many years has your firm been in operation?</i>		
1 - 5 years	127	82.5
11 – 15 years	1	0.6
16 years and above	4	2.6
6 - 10 years	22	14.3
<i>How many employees are in the firm?</i>		
30 – 99 employees	24	15.6
5 – 29 employees	43	27.9
Less than 5 employees	19	12.3
More than 100 employees	68	44.2
<i>Type of Ownership</i>		
fully foreign-owned	9	5.8

Fully locally owned	127	82.5
jointly Ghanaian & foreign-owned	18	11.7
Total	154	100.0

4.3 Working Capital Management Practices

The first objective of the study was to identify the current WCM practices of private agri-business firms in Ghana. Descriptive statistics (Mean and Standard) were used to examine the cost accounting systems adopted. The ratings for the items ranged from (1-Strongly disagree to 5-Strongly Agree). The results are shown in Table 4.2 below. As can be seen, the aggregate mean of 3.83 with a std. of 0.929 measures the WCM practices of private agri-business firms in Ghana. The mean shows that on average, the participants agree that these are the current working management practices in the private agri-business firms in Ghana. The standard deviation on the other hand also shows that the responses from the multiple respondents/informants do not vary widely, hence scoring are quite consistent across the respondents. The results show that “inventory management” was rated high with an average mean of 3.97 and std. of 0.880 which is above the aggregate mean. This means that inventory management is highly prioritised as the most common current working management practice in private agri-business firms in Ghana. Also, “account payable management” is recognised as a WCM practice as it recorded an average mean of 3.84 with a deviation of 0.886 higher than the aggregate mean. However, although “account receivable management” with an average mean of 3.69 and std. of 1.021 is moderately rated, it is not regarded as a common working management practice in private agri-business firms as its averages mean is lower than the aggregate mean.

Table 4. 2 Working Capital Management Practices

Working Capital Management Practices	N	Mini mum	Maxi mum	Mean	STDV
Inventory Management					
To satisfy consumer demand, our company keeps an adequate quantity of goods on hand.	154	1	5	4.11	0.947
Inventory management solutions are used by our company to optimise inventory levels and reduce stockouts.	154	1	5	3.92	0.829
Our company examines and adjusts inventory levels on a regular basis depending on demand and market trends.	154	2	5	4.04	0.783
Our company evaluates inventory turnover rates on a regular basis to find areas for improvement.	154	1	5	3.86	0.986
Our company has a defined procedure for dealing with surplus inventories.	154	1	5	3.94	0.857
Average Mean				3.97	0.880
Accounts Receivables Management					
To successfully handle accounts receivable, our company has implemented credit rules.	154	1	5	3.9	0.982
Our company continuously checks client creditworthiness and sets appropriate credit limits.	154	1	5	3.79	0.949
Our company has a system in place for monitoring and collecting past-due payments from clients.	154	1	5	3.81	1.159

Customers that pay their bills on time get discounts or incentives from our company.	154	1	5	3.16	1.051
Our company has a defined procedure for dealing with bad debts and write-offs.	154	1	5	3.77	0.962
Average Mean				3.69	1.021
Accounts Payable Management					
To optimise cash flow, our company actively handles payment terms with suppliers.	154	1	5	3.92	0.749
Our company has procedures in place for negotiating attractive payment arrangements with suppliers.	154	1	5	3.94	0.891
Accounts payable are reviewed and analysed on a regular basis by our organisation in order to find areas for improvement.	154	1	5	3.88	0.881
Our company has a system in place to monitor and manage supplier invoices and payments.	154	1	5	3.9	0.937
Our company takes advantage of supplier early payment discounts.	154	1	5	3.56	0.970
Average Mean				3.84	0.886
Aggregate Mean				3.83	0.929

4.4 Statistical Test and Analysis

The information is subjected to statistical testing. The effect of capital management on the financial performance of private agri-business businesses in Ghana was studied using a variety of techniques, such as reliability analysis, descriptive statistics, correlation analysis, and linear regression analysis.

4.4.1 Exploratory Factor Analysis

When working with multivariate statistics, the identification of hidden variables necessitates a thorough understanding of the theoretical foundations and hypothetical frameworks that could explain the organisation and structure of the observed data (Watkins, 2018). An Exploratory Factor Analysis (EFA) examines data relating to internal processes that are closely interrelated but have little connection with external variables. The EFA displays a remarkable degree of adaptability in its ability to be used in a variety of scenarios. According to Watkins (2018), a sample size of 10 to 15 participants is recommended for each independent variable. It is necessary to use a ratio or interval scale when analysing variables with different dimensions.

4.4.1.1 Test for Common Method Bias

The data was gathered by delivering questionnaires to study participants. Despite the use of proven procedures, survey bias is a persistent and important source of uncertainty. To improve comprehension of complicated issues and offer a greater grasp of the results, the research contains simple explanations and a range of survey questions. The major goal was to improve the survey's efficacy for the participants. Harman's one-factor test, as proposed by Podsakoff et al. (2003), was used to assess the presence of common method bias in the dataset. Table 4.3 shows the factor analysis findings, which show that eigenvalues equal to or higher than 1 account for 73.897% of the total variance in the dataset. The first component accounted for 36.436% of the total variance, which is less than 50%. There is no indication of common method bias in the dataset.

Table 4. 3 Common Method Bias

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.109	36.436	36.436	9.109	36.436	36.436
2	4.469	17.876	54.312	4.469	17.876	54.312
3	1.535	6.139	60.452	1.535	6.139	60.452
4	1.28	5.122	65.574	1.28	5.122	65.574
5	1.072	4.286	69.86	1.072	4.286	69.86
6	1.009	4.037	73.897	1.009	4.037	73.897
7	0.932	3.726	77.623			
8	0.818	3.271	80.893			
9	0.653	2.613	83.507			
10	0.624	2.494	86.001			
11	0.468	1.872	87.873			
12	0.44	1.758	89.632			
13	0.408	1.632	91.264			
14	0.36	1.438	92.703			
15	0.315	1.259	93.962			
16	0.295	1.178	95.14			
17	0.238	0.95	96.09			
18	0.226	0.905	96.995			
19	0.169	0.676	97.671			
20	0.149	0.595	98.266			

21	0.115	0.458	98.724
22	0.108	0.43	99.154
23	0.092	0.368	99.523
24	0.062	0.246	99.769
25	0.058	0.231	100

Extraction Method: Principal Component Analysis

4.4.1.2 Sampling Adequacy

The researcher used the Bartlett sphericity test and the KMO measure of sampling adequacy to assess the sample's representativeness. The obtained KMO score of 0.807 suggests a fair degree of sample adequacy for factor analysis. Furthermore, Bartlett's test produced a statistically significant result, suggesting that the data were suitable for factor analysis ($\chi^2 = 3109.116$, $df = 300$, $p < 0.05$). The findings in Table 4.4 indicate the sample's representativeness.

Table 4. 4 KMO and Bartlett's Test

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.807
Bartlett's Test of Sphericity	Approx. Chi-Square		3109.116
	df		300.000
	Sig.		0.000

4.4.2 Descriptive Statistics

Table 4.4 displays the mean and standard deviation of the latent constructs used in the model. The results indicate that inventory management obtained a mean score of 3.974 with a std. of 0.663, account receivable management obtained a mean of 3.686 with a std. of 0.757, account payable management also obtained a mean of 3.836 and deviation of 0.656 and financial performance obtained a mean of 3.707 with std. of 0.953. According to the data, the respondents provided high scores for all the constructs. The standard deviations provide evidence that the data is well-modelled around the mean. Therefore, the spread from the mean is not significantly wide.

The kurtosis and skewness statistics, presented in Table 4.5, are used as supplementary measures to assess the normality of the data. According to Garcia-Romero and Espy-Wilson (2011), the measures mentioned above are useful instruments for representing the probability distribution of a specific dataset. It is advisable to limit the range of multiple criteria variables within the interval of [-2,2]. Table 4.5 demonstrates that all variables fall within acceptable ranges for the study. The evidence of data normality provides a justification for the utilisation of regression analysis.

Table 4. 5 Descriptive Statistics

Constructs	Mean	Std. Deviation	Skewness	Kurtosis
Inventory management	3.974	0.6630	-1.227	1.806
Account Receivable Management	3.686	0.7566	-0.943	1.227
Account Payable Management	3.836	0.6562	-1.494	1.080
Financial Performance	3.707	0.9533	-0.939	1.056

4.4.3 Reliability Test

Construct reliability may be determined by studying the consistency of the dataset. The Cronbach's alpha (CA) coefficient was used as a measure of internal consistency in this study to examine the accuracy of assessing each construct. Table 4.6 displays the variables' reliability values. According to the data, the CA value for inventory management is 0.806, account receivable management is 0.792, account payable management is 0.791 and firm performance is 0.954. The study revealed that the CA values of the constructs were at least 0.7, indicating that the constructs demonstrate internal consistency and reliability, in accordance with the criteria set by Fornell and Larcker (1981) and Henseler et al. (2015). The data suggests that the model possesses unidimensionality, meaning that it measures a single construct and that it will consistently produce the same results when replicated.

Table 4. 6 Reliability Statistics

Constructs	N of Items	Cronbach's Alpha
Inventory Management	5	0.806
Account Receivable management	5	0.792
Account Payable management	5	0.791
Firm Performance	10	0.954

4.4.4 Correlation Analysis

The degree of association between the constructs was assessed through Pearson's correlation approach. The outcomes of the correlation analysis are presented in Table 4.7 below. The results indicate that inventory management is positively connected to account receivable management, account payable management and financial performance ($r=0.546$, $P<.01$; $r=0.570$, $P<.01$;

$r=0.434$, $P<.01$). Also, account receivable management is connected positively with account payable management, and financial performance ($r=0.623$; $P<.01$; $r=0.222$, $P<.01$). Account payable is also correlated positively with financial performance ($r=0.217$, $P<.01$). The correlation results prove that the interconnection between the independent variables are not strong and hence justify the absence of multicollinearity.

Table 4. 7 Correlation Statistics

Constructs	1	2	3	4
1. Inventory management	1			
2. Account Receivable Management	.546**	1		
3. Account Payable Management	.570**	.623**	1	
4. Financial Performance	.434**	.221**	.217**	1

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

4.4.5 Regression Analysis

The study proposed to examine the effect of WCM practices and the financial performance of private agri-business firms in Ghana. Multiple regression analysis was used to examine how WCM practices affect financial performance in the firms.

4.4.5.1 Model Summary

This is a summary section for the model. The R^2 value is 0.190, as shown in Table 4.8. The results show that 19.0% of the variance in agri-business financial performance may be attributed to the independent variables of inventory management, account receivable, and account payable management. With an adjusted R-squared of 0.173, we may deduce that 17.3 percent of the

variance in financial performance can be attributed to the significant independent variables in the model. This suggests that the remaining 81.0% of the difference in financial performance may be explained by the variables not accounted for in the research. Using the F-value and sig-value from the ANOVA test, we determined whether or not the association was statistically significant.

Table 4. 8 Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.435a	0.190	0.173	0.86676
a Predictors: (Constant), Account Payable Management, Inventory management, Account Receivable Management				

4.4.5.2 ANOVA

Table 4.9 displays the results of an ANOVA test, where the F-value is 11.692. This finding is statistically significant at the 0.000 level. The findings support the hypothesis that the variables are interconnected and the model accurately represents the data. This demonstrates that WCM practises are linked to improved financial outcomes.

Table 4. 9 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.352	3	8.784	11.692	.000b
	Residual	112.69	150	0.751		

a Dependent Variable: Financial Performance

b Predictors: (Constant), Account Payable Management, Inventory management, Account Receivable Management

4.4.5.3 Regression Coefficient

The regression equation for financial performance is $FP = 1.334 + 0.662IM - 0.004ARM - 0.063APM + \varepsilon$.

The constant (intercept) indicating the mean for financial performance with the value of 1.334 is statistically significant (Sig 0.006<0.05) as shown in Table 4.10.

4.4.5.3.1 Working Capital Management Practices and Organisational Performance

The study investigates the influence of inventory management on the financial performance of private agri-business firms. The results indicate that inventory management has a statistically significant positive influence on financial performance ($\beta=0.663$; $t=4.912$; $p\text{-value}=0.000 < 0.05$).

The findings support the hypothesis outlined in the study. This implies that holding other factors constant, inventory management accounts for a significant proportion of variation in financial performance. This suggests that a unit improvement in inventory management may contribute to a 66.3% improvement in the financial performance of private agri-business firms in Ghana.

The study also analyses how account receivable management affects financial performance. The results show that account receivable management has no effect on financial performance ($\beta=-0.004$; $t=-0.035$; $p\text{-value}=0.972 > 0.05$). The results contradict the hypothesis. The results suggest that everything else being equal, financial performance will not be affected by further improvements in account receivable management in the agri-business firms in Ghana.

The article also investigates how private agribusinesses in Ghana do financially by analysing their accounts payable practises. According to the findings, there is no statistically significant relationship between managing accounts payable and financial performance ($\beta=-0.063$; $t=-0.429$; $p\text{-value}=0.668 > 0.05$). The results do not support the study's hypothesised. This suggests that all else being equal, account payable management probably doesn't have a significant impact on improving financial performance. This finding implies that private agri-businesses may not benefit from an increase in account payable management effectiveness.

Table 4. 10 Regression Coefficient

Model		Unstandardised		Standardised	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.334	0.476		2.804	0.006
	Inventory management	0.662	0.135	0.46	4.912	0.000
	Account Receivable Management	-0.004	0.124	-0.003	-0.035	0.972
	Account Payable Management	-0.063	0.146	-0.043	-0.429	0.668

A Dependent Variable: Financial Performance

4.5 Factors Influencing the Effectiveness of Working Capital Management

The third objective of the study was to identify the factors that influence the effectiveness of WCM in private agri-business firms in Ghana. The findings are presented in Table 4.11 below. The results show that the aggregate mean value of 3.89 and std. of 0.905 measure the factors influencing the effectiveness of WCM in private agri-business firms in Ghana. The mean value shows that the participants on average agree that these factors influence the effectiveness of WCM of private agri-

business firms in Ghana. It can be seen from the table that “management support” was rated high among other factors with an average mean of 4.01 and deviation of 0.843. This means that management support is perceived as the most common factor that influences the effectiveness of WCM at private agri-business firms. It can also be seen that “Technology” was rated higher than the aggregate mean with an average mean of 3.99 and std. of 0.914. This implies that technology is also a common factor influencing the effectiveness of WCM at private agri-business firms in Ghana. Although “market environment,” “financial position” and “supplier relationship” with average means of 3.79; 3.86 and 3.82 and deviations of 0.929; 0.909 and 0.928 was rated high they are not perceived to be significant factors influencing the effectiveness of WCM of private agri-business firms their average means are lower than the aggregate mean.

Table 4. 11 Factors Influencing the Effectiveness of Working Capital Management

Factors	Mini mum	Maxi mum	Mean	STDV
Management Support				
To guarantee the success of our firm's working capital management practices, top management supports them.	1	5	3.98	0.904
Our company offers the resources needed to support successful working capital management practices.	1	5	3.97	0.836
For working capital management practises our company has set defined rules and procedures.	1	5	4.06	0.845

Employees at our organisation have access to training and development options to help them improve their working capital management abilities.	1	5	4.06	0.729
Our organisation checks and assesses the efficacy of working capital management practices on a regular basis.	1	5	4.00	0.900
Average Mean			4.01	0.843
Market Environment				
The Ghanaian market climate has an influence on our firm's working capital management practices.	1	5	3.99	0.750
Market conditions might impact the availability and cost of working capital.	1	5	3.75	1.025
The amount of market rivalry influences our company's working capital management practices.	1	5	3.83	1.015
To guide working capital management practises, our organisation tracks and evaluates market developments.	1	5	3.62	0.871
In reaction to changes in the market environment, our company adapts its working capital management practises.	1	5	3.75	0.986
Average Mean			3.79	0.929
Technology				
Technology enhances the efficiency of our firm's working capital management practices.	1	5	3.79	0.822
Technology is used by our company to automate and simplify working capital management procedures.	1	5	4.12	0.914

Technology helps our company to more efficiently monitor and assess working capital management performance.	1	5	3.94	1.014
Our company invests in new technologies on a regular basis to enhance working capital management practices.	1	5	4.12	0.855
Our company's use of technology has improved communication and cooperation with suppliers and customers.	1	5	3.99	0.963
Average Mean			3.99	0.914
Financial Position				
The efficiency of our working capital management practises is affected by our company's financial health.	1	5	4.08	0.885
Our ability to efficiently manage working capital is influenced by our company's financial status.	1	5	3.88	0.938
The efficiency of working capital management strategies may be impacted by changes in interest rates and currency exchange rates.	1	5	3.79	0.922
Our organisation uses financial measures to track the efficiency with which working capital is being managed.	1	5	3.85	0.934
The potential financial risks associated with working capital management procedures are familiar territory for our company.	1	5	3.69	0.867
Average Mean			3.86	0.909
Supplier Relationships				
The efficiency of our company's working capital management procedures is impacted by the strength of our relationships with our suppliers.	1	5	3.87	0.92

Having solid relationships with one's suppliers may improve payment terms and reduce the requirement for working capital.	1	5	3.82	0.836
Our business maintains consistent communication with its suppliers in an effort to better manage its working capital.	1	5	3.77	1.095
Our organisation collaborates with vendors to enhance their inventory management procedures.	1	5	3.75	0.89
Our business has established transparent policies and processes for handling our supplier relationships.	1	5	3.87	0.898
Average Mean			3.82	0.928
Aggregate Mean			3.89	0.905

4.6 Discussion of Findings

This section discusses how the main results connect to additional results that have similar patterns.

The research set out to examine the relationship between WCM and the success of Ghana's private agribusinesses in terms of both output and profitability. Transaction Cost Theory and trade-off theory served as theoretical bedrock for the investigation. The results are presented in the sections that follow; they are structured to reflect the aims of the research.

4.6.1 Working Capital Management Practices

The first objective of the study was to identify the current WCM practices of private agri-business firms in Ghana. The findings show that inventory management and account payable management are the most current WCM practices of private agri-business firms in Ghana but not account receivable management.

The findings suggest that private agri-business firms in Ghana prioritise inventory optimisation and payables management to enhance their working capital situation. They concentrate on inventory management to decrease holding costs and account payables management to improve cash flow. They do not, however, devote comparable attention to controlling account receivables, which may result in delayed client payments and cash flow concerns.

WCM is critical for maintaining operations and establishing financial stability in the context of agri-business businesses in developing countries such as Ghana. According to research, inventory management is an important part of WCM in the agriculture business. Nyamah et al. (2022) discovered, for example, that good inventory management helps agri-business businesses cut holding costs, minimise stockouts, and increase supply chain efficiency. Account payable management is another important practice seen in the industry. According to Ncube (2020), agri-business businesses in India (a setting comparable to Ghana) prioritise timely payments to suppliers in order to preserve strong connections and negotiate favourable payment conditions. According to Bathla and Hussain (2022), agri-business organisations often confront issues connected to perishable items and seasonality, making effective inventory management critical for minimising holding costs and assuring product availability. Owot et al. (2023) discovered that timely payments to suppliers may assist agri-business businesses in building good connections and negotiating favourable payment conditions.

However, in the agri-business sector, a lack of attention on account receivable management is not unusual. For example, Rao et al. (2022) discovered that agricultural enterprises in Bangladesh (another developing nation with a similar economic environment to Ghana) suffer difficulty in handling account receivables, resulting in delayed client payments and cash flow concerns. Another research conducted in Tunisia by Manciya (2022) revealed that agricultural enterprises

struggle with handling account receivables, resulting in delayed client payments and cash flow issues.

4.6.2 Working Capital Management Practices and Organisational Performance

The second goal was to see how private agribusinesses in Ghana would do financially if they improved their WCM. Three variables namely; inventory management, account receivable management and account payable management were used to measure WCM for the private agri-business firms. The findings from the study showed that inventory management has a positive and significant effect on the financial performance of the private agri-business firms in Ghana, however, accounts receivable and payable do not have any significant effect on financial performance.

The findings suggest that effective inventory control, which includes optimising stock levels and lowering holding costs, may improve operational efficiency and profitability. The findings also suggest that, although timely payments and strong credit control are important, the influence of accounts receivable and payable management on financial performance may be less obvious in the case of agri-business.

Effective inventory management may have a positive and considerable impact on the financial performance of enterprises, especially agri-businesses, according to various studies across multiple industries. Hasan et al. (2021) discovered, for example, that optimising inventory levels may decrease holding costs and improve operational efficiency, resulting in increased profitability and financial performance. Effective inventory management ensures that agricultural businesses can satisfy client requests on time, eliminate waste, and maintain a healthy cash flow. According to

Vijayakumar (2021), optimising inventory levels may result in lower holding costs, greater cash flow, and increased operational efficiency, all of which contribute to improved financial performance. Inventory management assists agri-business organisations in ensuring timely product availability and reducing waste, which may improve profitability and overall financial health. The association between account receivable and payable management practises and financial success, on the other hand, may not necessarily be important in all scenarios. According to studies such as those conducted by Mubarok (2020), although timely account receivable and payable management is critical for maintaining excellent liquidity, the direct influence on financial performance may differ depending on industry characteristics and economic situations. Account receivable and payable management may have an indirect impact on financial performance in certain situations, impacting cash flow and liquidity rather than directly influencing profitability.

4.6.3 Factors Influencing the Effectiveness of Working Capital Management

The third objective of the study was to investigate the factors that influence the effectiveness of WCM in private agri-business firms in Ghana. The findings showed that management support and technology are the most significant and common factors that affect the effectiveness of WCM of the private agri-business firms in Ghana, whereas market environment, financial position and supplier relationship were not regarded as significant factors influencing the effectiveness of WCM.

The findings suggest that management support and the use of technology play critical roles in properly managing working capital in private agri-business firms in Ghana. These variables have

a major and pervasive influence on the firm's capacity to manage working capital efficiently. However, factors such as the market environment, financial position, and supplier relationships were not found to have a significant influence on WCM effectiveness in this context, implying that other factors may be more important in determining the firm's working capital performance.

WCM research has emphasised the crucial roles of managerial assistance and technology in determining the efficiency of WCM in a variety of sectors, including agriculture. In the agriculture industry, for example, Samujh and Parahoo (2019) discovered that strong management support and dedication are critical for implementing efficient working capital strategies and guaranteeing solid financial management practices. Furthermore, the adoption and use of technology may speed procedures, improve data quality, and enable improved WCM decision-making (Kodwani & Chong, 2020). The link between the market environment, financial condition, supplier relationships, and the effectiveness of WCM, on the other hand, may not necessarily exhibit substantial impacts in all cases. According to Chong and Eggleton (2018), although the market environment and financial standing might have an impact on working capital requirements, the direct impact on WCM efficiency varies depending on industry features and economic circumstances. Similarly, the impact of supplier connections on the effectiveness of WCM may be influenced by variables such as the firm's procurement practices and market dynamics (Hart et al., 2017).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The research concludes with a chapter that effectively summarises its results, draws definitive conclusions, and provides insightful suggestions based on those findings. This chapter comprehensively discusses the significance and limitations of the study. The subsection of the study provides further details on the specific aims of the study, which are derived from its findings. The recommendation section in the chapter provides essential suggestions that are based on the main findings of the study. The last section discusses potential areas for future research.

5.2 Summary of Findings

The general objective of the study was to investigate the effectiveness of WCM and financial performance of private agri-business firms in Ghana. The integration of the previously mentioned review with the existing body of literature highlights the most significant findings. The presented outcomes are deemed appropriate in alignment with the research objectives.

5.2.1 Working Capital Management Practices

The primary aim of this study was to ascertain the existing WCM strategies employed by private agri-business businesses in Ghana. The results indicate that private agri-business businesses in Ghana primarily focus on inventory management and account payable management as their present (WCM) practices. However, account receivable management does not appear to be a prominent area of emphasis for these firms. The findings suggest that private agri-business firms in Ghana prioritise inventory optimisation and payables management to enhance their working capital situation. They concentrate on inventory management to decrease holding costs and account payables management to improve cash flow. They do not, however, devote comparable

attention to controlling account receivables, which may result in delayed client payments and cash flow concerns.

5.2.2 Working Capital Management Practices and Organisational Performance

The second purpose of the research was to analyse how WCM affected the bottom lines of Ghanaian private agri-businesses. The private agri-businesses' WCM was evaluated in three dimensions: inventory management, account receivable management, and account payable management. Inventory management was shown to have a positive and statistically significant influence on the financial performance of private agri-business businesses in Ghana, but neither accounts receivable nor payable had any discernible impact. The findings suggest that effective inventory control, which includes optimising stock levels and lowering holding costs, may improve operational efficiency and profitability. The findings also suggest that, although timely payments and strong credit control are important, the influence of accounts receivable and payable management on financial performance may be less obvious in the case of agri-business.

5.2.3 Factors Influencing the Effectiveness of Working Capital Management

The third objective of the study was to investigate the factors that influence the effectiveness of WCM in private agri-business firms in Ghana. The findings showed that management support and technology are the most significant and common factors that affect the effectiveness of WCM of the private agri-business firms in Ghana, whereas market environment, financial position and supplier relationship were not regarded as significant factors influencing the effectiveness of WCM. The findings suggest that management support and the use of technology play critical roles

in properly managing working capital in private agri-business firms in Ghana. These variables have a major and pervasive influence on the firm's capacity to manage working capital efficiently. However, factors such as the market environment, financial position, and supplier relationships were not found to have a significant influence on WCM effectiveness in this context, implying that other factors may be more important in determining the firm's working capital performance.

5.3 Conclusion

The primary objective of this study was to investigate the correlation between working capital management (WCM) and the performance of private agribusinesses in Ghana, specifically in terms of their output and profitability. The study employed quantitative methodologies and conducted inferential analysis. The study employed a cross-sectional and descriptive research approach. This research primarily examined the owners and managers of private agri-businesses in Ghana. A purposive sampling strategy was employed to survey a cohort of 154 participants, considering their level of acquaintance with waste management practices and the performance of commercial agricultural enterprises. The research inquiries were examined utilizing the statistical software SPSS v26. Descriptive statistics were employed to summarize the data. The study employed regression analysis to assess the underlying assumptions. The results indicate that private agri-business businesses in Ghana predominantly employ inventory management and account payable management as their primary working capital management (WCM) methods. However, account receivable management does not appear to be as prevalent among these firms. The results of the study indicate that inventory management has a statistically significant and beneficial impact on the financial performance of private agri-business businesses in Ghana. However, it was found that accounts receivable and accounts payable do not have a significant effect on financial performance. The effectiveness of working capital management (WCM) in private agri-business

firms in Ghana is primarily influenced by management support and technology. These factors are widely recognized as significant and common determinants. On the other hand, the market environment, financial position, and supplier relationship were found to have limited impact on the effectiveness of WCM in these firms. Based on the findings, this study finds that the matter of working capital management (WCM) continues to be of utmost importance for the success or failure of enterprises, and therefore warrants sufficient attention within the context of agriculture.

5.2 Recommendation

Based on the findings that inventory management and account payable management are the most current WCM practises in private agri-business firms in Ghana and that inventory management has a positive and significant effect on financial performance while account receivable and payable do not, as well as the importance of management support and technology in driving WCM effectiveness, the following suggestions can be made.

To decrease holding costs, minimise stock-outs, and increase supply chain efficiency, private agribusiness enterprises should concentrate on optimising their inventory management practices. Implementing technology-driven inventory control systems and current inventory management practices will help with improved inventory monitoring and control, assuring timely product availability while minimising surplus stock.

It was found that account receivable management has no substantial influence on financial performance, it is nevertheless critical for ensuring a healthy cash flow and prompt customer payments. To decrease customer payment delays and increase liquidity, private agribusiness enterprises can strengthen their collection operations, enforce credit conditions, and use

technology-enabled billing and invoicing systems. Effective WCM practises need strong managerial support and dedication. Top management should actively participate in financial decision-making and offer enough resources and support for projects aimed at optimising working capital. The engagement of leadership may develop a culture of financial prudence and ensure that working capital plans are aligned with overall company goals.

The research emphasises the importance of technology in WCM. To improve financial data accuracy, decision-making, and general efficiency, private agri-business businesses should invest in modern financial software, data analytics tools, and other digital solutions. Adopting technology may help enhance cash flow forecasts, make financial information more accessible, and simplify working capital procedures.

5.5 Limitations and Future Research Direction

One possible restriction might be the study's sample size and length. The results might be confined to a particular location or segment of Ghana's agri-business economy. Future studies could look at a bigger and more diversified sample to guarantee wider generalisability and capture the intricacies of WCM practises across different agri-business sub-sectors. Another constraint might be the study's time span. Because of changes in market circumstances, legislation, and technology improvements, WCM practises and their influence on financial performance may alter over time. Longitudinal studies that follow changes in working capital practises and financial performance over time may give further insight into their link. External variables such as economic swings, currency instability, or changes in industry demand may have had an impact on the results. Future studies should look at the influence of these external variables on WCM and financial performance to better understand how they affect results. The observed correlations between WCM practice and financial performance may be affected by causality and endogeneity concerns. Future research

may use advanced econometric techniques like panel data analysis or instrumental variable approaches to demonstrate causation and address potential endogeneity issues. In order to further understand the underlying causes and obstacles of WCM in Ghanaian private agri-business organisations, future study might augment the existing results with qualitative studies, such as interviews or case studies.



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APPENDIX
SURVEY QUESTIONNAIRE

Dear Sir/ Madam,

My name is, This survey instrument has been designed to enable me carry out research on the topic: “The Effectiveness of Working Capital Management and Performance of Private Agri-Business Firms”. Any information provided will be used for academic purposes **ONLY**. There are no risks associated with your participation, and your responses will remain confidential and anonymous.

SECTION A: RESPONDENT’S BIOGRAPHY AND COMPANY PROFILE

When completing this questionnaire, please tick [✓] in the applicable box or provide an answer as applicable.

Please answer the following questions:

1. *Gender:* Male ☐ Female ☐
2. *Age*
18-30 years ☐ 31-40 year’s ☐ 41-50 years ☐ above 50 years ☐
3. *Level of Education*
Junior High School ☐ Senior High School ☐ Diploma ☐ Bachelor Degree ☐
☐ Graduate Studies (Master / Ph.D.) ☐ Others ☐ For Others, Please specify...
4. *Your Position in the Firm*
Business Owner ☐ Business Owner & Manager ☐ Manager ☐ Production Manager ☐
☐ Others ☐.....
5. *How many years have your firm been in operation?*
1 - 5 years ☐ 6 - 10 years ☐ 11 – 15 years ☐ 16 years and above ☐
6. *How many employees are in the firm?*
Less than 5 employees ☐ 5 – 29 employees ☐ 30 – 99 employees ☐ More Than 100 ☐
7. *Type of ownership:*

[] Fully locally owned [] fully foreign owned [] jointly Ghanaian & foreign owned

8 Age of the firm

1 - 5 years ☐ 6 - 10 years ☐ 11 – 15 years ☐ 16 years and above ☐

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SECTION B: Working Capital Management Practices

Please answer the following questions pertaining to **Talent Development** in your firm. On a scale of 1 to 5 (*1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree*) indicate your opinion *by ticking* \sqrt *where appropriate* in the following statements.

Item	Statement	1	2	3	4	5
	Inventory Management					
IM1	Our firm maintains an appropriate level of inventory to meet customer demand.					
IM2	Our firm uses inventory management systems to optimize inventory levels and minimize stock outs.					
IM3	Our firm regularly reviews and updates inventory levels based on demand and market trends.					
IM4	Our firm regularly monitors inventory turnover rates to identify opportunities for improvement.					
IM5	Our firm has a clear policy for managing excess inventory levels.					
	Accounts Receivables Management					
ARM1	Our firm has established credit policies to manage accounts receivables effectively.					

ARM2	Our firm actively monitors customer creditworthiness and establishes credit limits accordingly.					
ARM3	Our firm has a system for tracking and collecting overdue payments from customers.					
ARM4	Our firm offers discounts or incentives to customers for early payment of invoices.					
ARM5	Our firm has a clear policy for managing bad debts and write-offs.					
	Accounts Payable Management					
APM1	Our firm actively manages payment terms with suppliers to optimize cash flow.					
APM2	Our firm has established policies for negotiating favourable payment terms with suppliers.					
APM3	Our firm regularly reviews and analyses accounts payable to identify opportunities for improvement					
APM4	Our firm has a system for tracking and managing supplier invoices and payments.					
APM5	Our firm takes advantage of early payment discounts offered by suppliers.					

SECTION C: Factors that influence the effectiveness of working capital management in private agri-business firms in Ghana.

Please answer the following questions pertaining to factors that influence the effectiveness of working capital management practices in private agri-business firms in Ghana. On a scale of 1 to

5 (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree) indicate your opinion *by ticking* ✓ *where appropriate* in the following statements.

Item	Statement	1	2	3	4	5
	Management Support					
MS1	Top management in our firm supports working capital management practices to ensure their effectiveness					
MS2	Our firm provides the necessary resources to support effective working capital management practices.					
MS3	Our firm has established clear policies and guidelines for working capital management practices.					
MS4	Our firm provides training and development opportunities for employees to enhance their skills in working capital management.					
MS5	Our firm regularly monitors and evaluates the effectiveness of working capital management practices.					
	Market Environment					
ME1	The market environment in Ghana impacts the effectiveness of our firm's working capital management practices.					
ME2	Changes in the market environment can affect the availability and cost of working capital.					
ME3	The level of competition in the market affects our firm's working capital management practices					
ME4	Our firm monitors and analyses market trends to inform working capital management practices.					

ME5	Our firm adjusts working capital management practices in response to changes in the market environment.					
	Technology					
TECH1	The use of technology improves the effectiveness of our firm's working capital management practices.					
TECH2	Our firm uses technology to automate and streamline working capital management processes.					
TECH3	Technology enables our firm to track and analyse working capital management performance more effectively.					
TECH4	Our firm regularly invests in new technology to improve working capital management practices.					
TECH5	The adoption of technology has enabled our firm to improve communication and collaboration with suppliers and customers.					
	Financial Position					
FPO1	Our firm's financial position influences the effectiveness of working capital management practices.					
FPO2	Our firm's liquidity position affects our ability to manage working capital effectively.					
FPO3	Changes in interest rates or currency exchange rates impact the effectiveness of working capital management practices.					
FPO4	Our firm uses financial ratios to monitor and evaluate working capital management performance.					

FPO5	Our firm has a clear understanding of the financial risks associated with working capital management practices					
	Supplier Relationships					
SR1	The quality of our firm's relationships with suppliers affects the effectiveness of working capital management practices.					
SR2	Good relationships with suppliers can result in favourable payment terms and reduced working capital requirements.					
SR3	Our firm regularly communicates with suppliers to manage working capital more effectively.					
SR4	Our firm collaborates with suppliers to optimize inventory management practices					
SR5	Our firm has established clear policies and guidelines for managing supplier relationships.					

SECTION D: FINANCIAL PERFORMANCE

To what extent do the statements apply to your firm? (1 – Strongly disagree; 5 – strongly agree):

Item	Statement	1	2	3	4	5
FP1	Our agri-business firm has experienced an increase in revenue over the past year.					
FP2	Our agri-business firm has maintained a positive net income over the past year.					
FP3	Our agri-business firm has been able to effectively manage its expenses and control costs.					
FP4	Our agri-business firm has a strong balance sheet with healthy levels of assets and low levels of debt.					
FP5	Our agri-business firm has been able to generate strong returns on investment for shareholders.					

FP6	Our agri-business firm has been able to effectively manage its cash flow to ensure timely payments to suppliers and creditors.					
FP7	Our agri-business firm has been able to secure financing at favorable terms to support its growth and expansion.					
FP7	Our agri-business firm has been able to effectively manage its inventory levels to ensure optimal use of resources.					
FP8	Our agri-business firm has been able to maintain a competitive edge in the market through effective financial management practices					
FP9	Our agri-business firm has been able to effectively manage its working capital to support its day-to-day operations					

Thank you for participating in the survey.

