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ACCESSING THE IMPACT OF SUPPLY CHAIN FINANCING ON
ORGANIZATIONAL PERFORMANCE: THE MEDIATING ROLE OF
SUPPLY CHAIN INTEGRATION

BY

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A THESIS SUBMITTED TO THE DEPARTMENT OF SUPPLY CHAIN AND
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MASTER OF SCIENCE (LOGISTICS AND SUPPLY CHAIN MANAGEMENT)

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DECLARATION

I hereby declare that this thesis is the result of my original work towards the MSc. in Logistics and Supply Chain Management and that, to the best of my knowledge, it neither contains material published by another person nor materials which have been accepted for the award of any other degree of the University, except where due acknowledgments have been made in the text.

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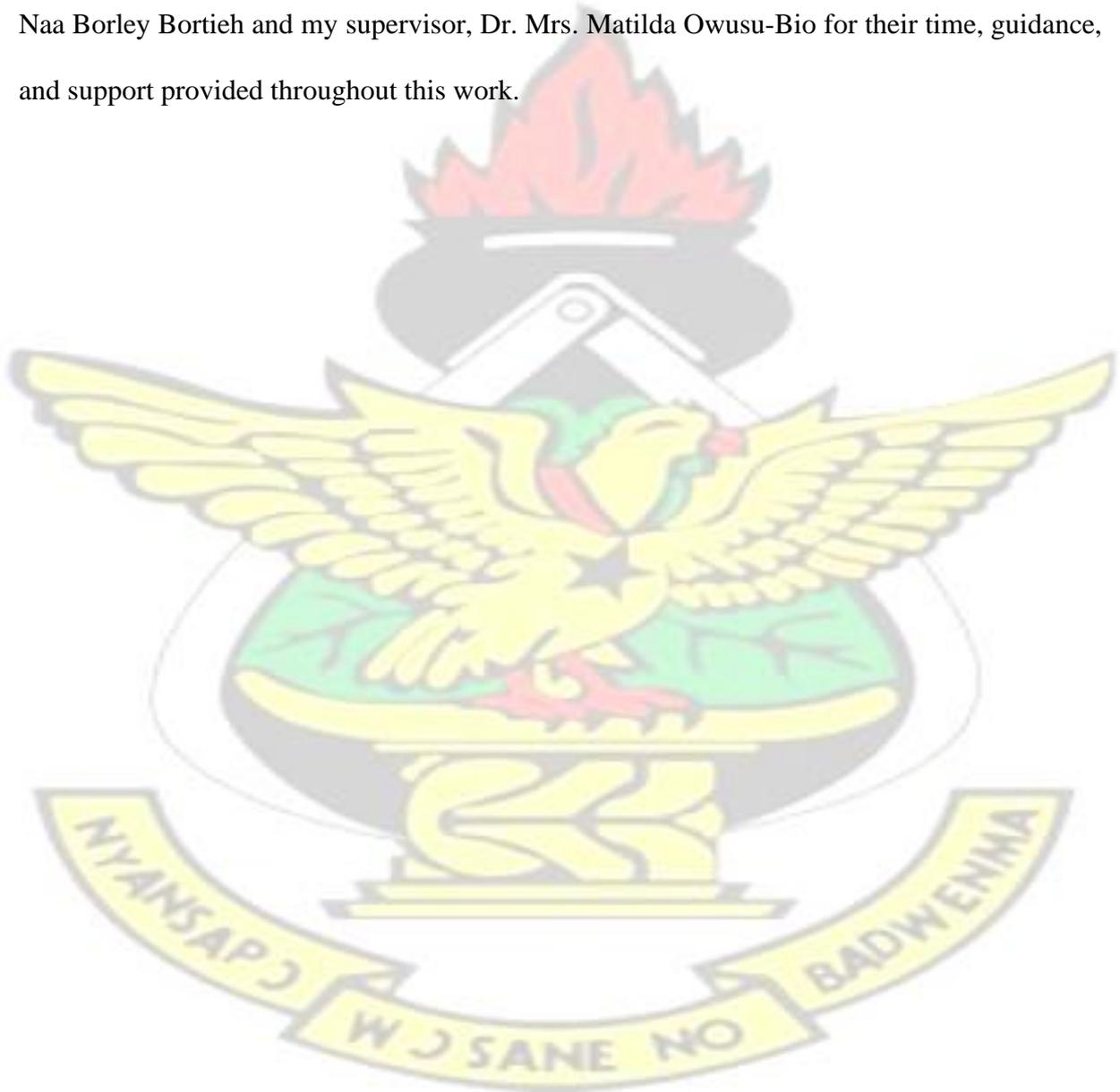
DEDICATION

This thesis is first and foremost dedicated to Jehovah for protecting and seeing me through. I also dedicate this work to my parents Solomon Sebi and Betty Sebi for supporting me and motivating me.



ACKNOWLEDGEMENTS

Getting this thesis done was not an easy task. Though challenging, it has been exciting as well for the simple reason that it has offered me the opportunity to contribute to research. I wish to acknowledge Jehovah for the strength, zeal, and intellect He immensely provided. To Rebecca Naa Borley Bortieh and my supervisor, Dr. Mrs. Matilda Owusu-Bio for their time, guidance, and support provided throughout this work.



ABSTRACT

This research study aimed to assess the impact of supply chain financing on organizational performance, and the mediating role of supply chain integration. The study utilized a survey methodology and focused on SMEs and manufacturing companies in Ghana in the Kumasi and Accra metropolis listed on the Ghana Stock Exchange and Ghana Club 100, bankers, procurement professionals, and suppliers. A total of 200 respondents participated in the survey. The analysis of the collected data involved examining the link between supply chain finance on organizational performance and the mediating role of supply chain integration. In addition, the analysis also focused on the demographic and characteristics of firms from which the respondents were drawn. Next, the study evaluated the relationship between supply chain financing strategy and firm performance. The adoption of supply chain finance practices has been associated with advantages such as lower unit costs of procured goods, reduced supply disruptions, extended payment terms, and improved business continuity. The study's positive correlation supports the argument that effective supply chain financing can enhance a firm's overall performance. Furthermore, the study also investigated the influence of supply chain integration on firm performance. The study's finding underscores the idea that effective supply chain integration can contribute positively to a firm's overall performance. The study also analyses the direct and indirect results related to the mediating effect of supply chain integration on the relationship between supply chain financing strategy and organizational performance. The study's full mediation finding suggests that the positive effect of supply chain financing strategy on firm performance becomes significant only when supply chain integration is absent, highlighting the importance of an integrated approach for realizing the benefits of financing strategies.

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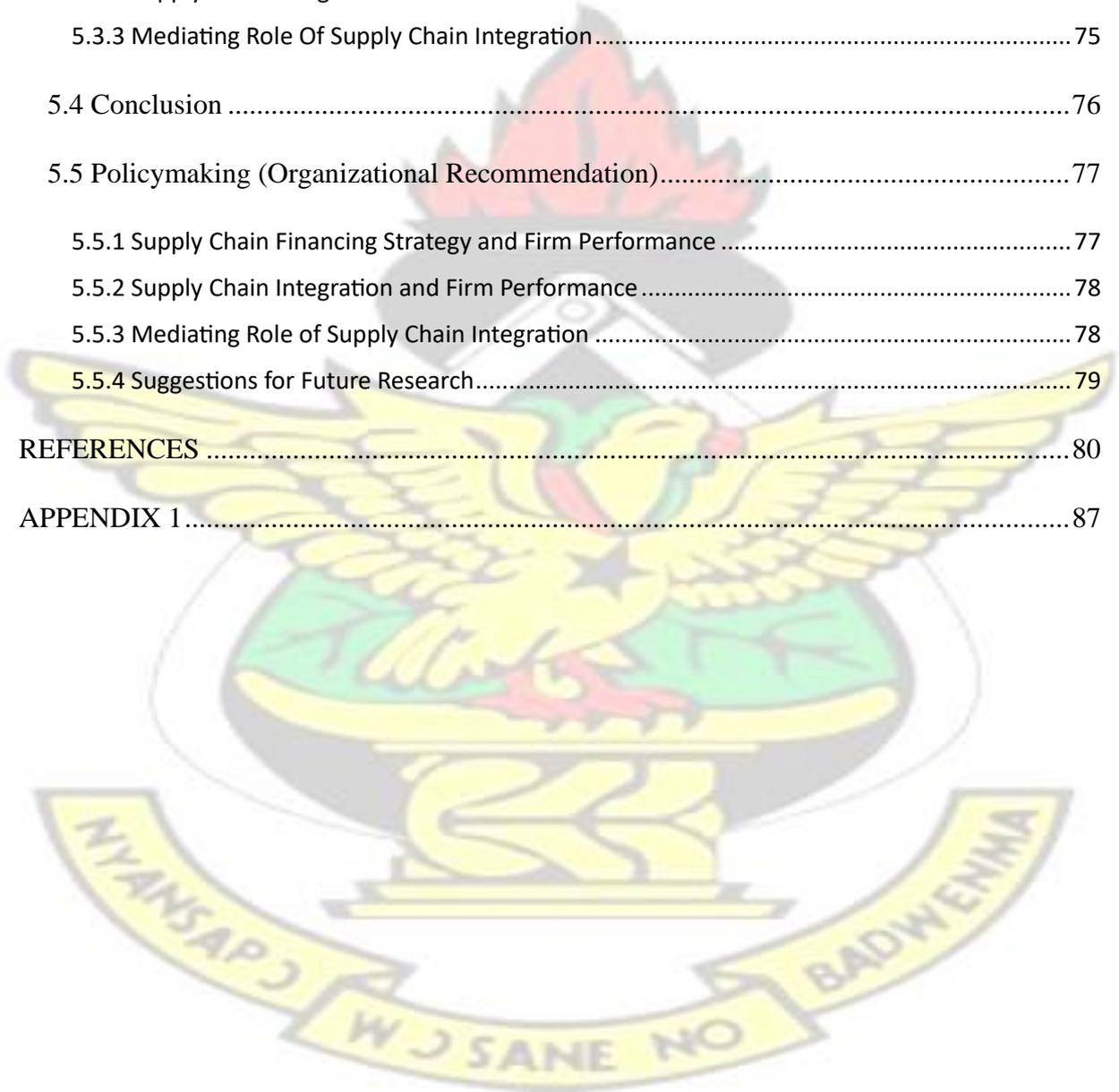
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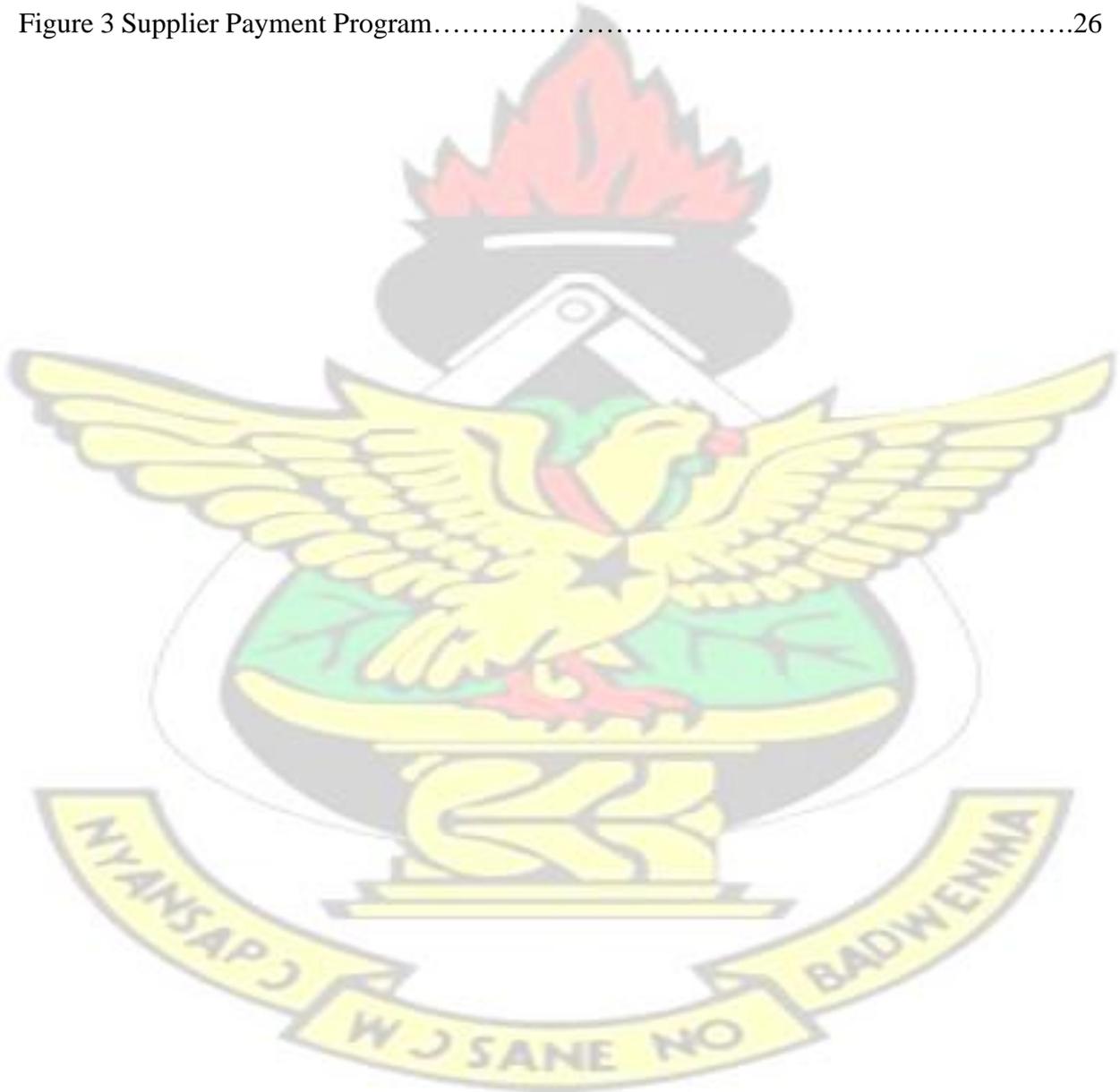


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CHAPTER ONE INTRODUCTION

1.1 Background of the Study

The supply chain may be seen as a lengthy series of procedures and actions, some of which are performed by the organisation and others by suppliers or consumers. Within an enterprise, operations may be seen as a single full operation from a larger viewpoint. It may also be seen as a series of independent activities that must be completed in order to change the beginning inputs into the final accomplished output or service. Supply Chain Finance (SCF) has emerged as a new body of literature at the interface of financial and supply chain management in the last few decades. SCM investigation.

Material and information transfers inside and across organisations are related to financial flows. Steps taken to improve a company's working capital situation may have an adverse effect on the overall performance of the organisation. Reduced stocks, for example, may result in reduced service levels to achieve customer satisfaction. When payment terms are extended, it raises suppliers' working capital and increases the risk of debt in the supply chain (Martin and Hofmann, 2017). With the rising degree of rivalries in the world's economy, the hunt for better methods to obtain an edge in order to remain relevant or outsmart the competition is transforming the global economy. This has prompted supply chain leaders and specialists to consider integration as a feasible technique for forming strategic alliances in order to enhance supply chain performance, cut costs, and shorten lead times.

Supply chain integration (SCI) is defined as a scenario in which components of the supply chain communicate and work together to improve earnings and performance while satisfying customer needs. Firms that integrate their data and materials flow would have better supply chain management (Samaranayake, P. 2005). Most companies and organisations in sectors are putting

in the required effort to position their enterprises strategically for the purpose to be greater competitors and attain customer satisfaction. Firms strive to cut operating costs across their supply chain operations by doing so. It entails the synchronisation of business operations inside a company and with its partners in the supply chain in order to minimise costs, create customer value, and improve overall supply chain performance for all partners. Although the advantages of Supply Chain Integration (SCI) are well documented, the critical design aspects that will lead to enhanced performance have yet to be completely realised. There have also been differences in the data on whether integration really leads to increased supply chain performance (Stank et al 2001).

Supplier integration relates to the procedures and activities associated with sharing information and collaborative planning with important suppliers in order to fulfil the stated aims and goals of the focal business, with the advantages of cost savings, customer satisfaction, and better lead times (Vikas Kumar et al, 2017). The current economic slump, which lasted from 1991 to 2009, had an impact on the pace at which insurance companies made new loans to organisations, resulting in a large rise in interest rates (Ivashina and Scharfstein, 2010). The recent economic conditions that have resulted from the worldwide financial crisis of 2008, as well as substantial liquidity constraints and increased sensitivity to risk in financial markets, have created a slew of issues for businesses attempting to finance their business activities and manage their working capital efficiently. In this context of inadequate liquidity, the expense of funding has risen dramatically, and suppliers, particularly small and medium-sized firms (SMEs), are finding it difficult to secure the financing that they require (Lekkakos and Serrano, 2016).

Firms attempted for extending trade credit from suppliers to supplement other forms of financing, while organisations not affected by the credit crunch acted as liquidity providers, accepting longer terms for payments (Coulibaly et al., 2013; Garcia-Appendini and Montoriol-Garriga, 2013). These impacts increased a desire for services and programmes that optimise working capital.

Supply chain finance (SCF) is one of the most significant ways among them (Polak et al, 2012). The supply chain finance approach's significance is dependent on collaboration among supply chain participants, which often results in lower debt costs, new alternatives for getting loans from financial institutions, or decreased financial resources within the supply chain. Furthermore, the supply chain finance strategy often increases trust, dedication, and competitiveness across the chain (Randall and Farris, 2009).

Because it is difficult to get inexpensive external finance, most organisations have shifted their focus to looking throughout their financial supply chain for possibilities to enhance working capital management, optimise cash flows, and free trapped cash. Supply chain finance thus entails the use of monetary gear, operations, and advances in technology which facilitate strategies in the financial supply chain by covering special attention to supply chain processes such as purchase order placement, restocking inventory, order delivery, invoice approval, and so on (Lekkakos and Serrano, 2016). As a result, it is critical to consider the supply chain as an important strategic tool. If organisations only consider altering their supply chain when there is a problem, they are unlikely to perceive it as a valuable asset that may provide the firm with a competitive edge. In this instance, they risk being caught off guard by corporations who utilise their supply chain as a tool of strategy. Most industry leaders recognise that the supply chain may be a strategic difference. They are continually looking for new methods to bring value and exceed the limits of performance. And they are always improving their supply networks in order to remain one step beyond other businesses. They understand that today's competitive advantage is the following day's cost of entry (Cohen and Rouse, 2005).

To coordinate the movement of products, services, and money across different stages of the supply chain, global the management of the supply chain systems depend on financial procedures in addition to production, shipping, and marketing activities. Supply chain finance is a mix of

technological advances and financial services that link global value chain (GVC) stakeholders, providers, financial institutions, and, in many cases, technology service providers. They are intended to enhance the performance of financial supply chains by eliminating harmful cost shifting and increasing the visibility, availability, delivery, and cost of cash for all supply chain participants. Companies have their sights on enabling open account trading, which today accounts for 80 percent of global trade. Shopping, motor vehicles manufacturing, electronics, food and beverage, pharmaceuticals, distribution, heavy equipment, and technology are all good candidates for supply chain finance solutions (Lamoureux and Evans, 2010). This has had an influence on the global supply chain, as well as improved its efficacy in funding supply networks.

Chain of Supply Over the years, integration has evolved as a key subject of study, including the strategic alignment of departments and processes inside an organisation. Internal integration has been described as the "linking of business processes of divisions in an organisation into a strategic fit to enhance performance, and it is defined as the linking of business operations of departments in an organisation into a strategic fit for enhanced performance. (Vikas Kumar et al, 2017).

1.2 Problem Statement

In recent years, the role of supply chain financing (SCF) in enhancing organizational performance has gained considerable attention. SCF, characterized by its integration of technological solutions and financial services, aims to streamline financial supply chains, optimize cash flows, and alleviate working capital constraints within global value chains (GVCs) (Lekkakos and Serrano, 2016). Recent research articles have contributed to the understanding of supply chain financing (SCF) and its impact on organizational performance within the context of manufacturing companies in Ghana.

Lekkakos and Serrano (2016) underscore the challenges confronted by Ghanaian organizations in securing direct funding, often due to the lack of assurances. They highlight the potential of SCF in mitigating restricted credit availability and its potential positive influence on industrial performance. Vikas Kumar et al. (2017) offer valuable insights by proposing key performance indicators aimed at evaluating supply chain integration, emphasizing the necessity for a comprehensive comprehension of the design elements of integration that ultimately enhance performance. More and Basu (2013) identify several factors contributing to the failure of SCF implementation, encompassing issues like inadequate shared vision among supply chain partners, delays in financial transactions, and insufficient knowledge and training. Their findings accentuate the obstacles that can impede the success of SCF initiatives. Furthermore, Srinivasa Raghavan and Vinit (2011) stress the global significance of trade credit, encompassing supply chain financing, as a pivotal source of working capital, while underscoring the challenges faced by numerous organizations, particularly startups and growing firms, in accessing such financing.

Despite existing research, there remains a gap in understanding the specific determinants of success or failure in supply chain financing within the context of Ghana's manufacturing sector. While previous studies have discussed the impact of SCF on organizational performance, they often lack a comprehensive exploration of the mediating role of supply chain integration. Moreover, the research has largely focused on financial aspects, leaving a gap in understanding the broader operational and strategic implications of SCF. Based on these research gaps, the present study aims to investigate the influence of supply chain finance on organisational performance in Ghana through the mediating function of supply chain integration.

1.3 Research Objective

The main research of the study is to assess the impact of supply chain financing on organizational performance, the mediating role of supply chain integration.

The specific objectives are as follows:

1. To determine an organization's Supply Chain Financing strategy and practices.
2. To assess the effect of Supply Chain financing solutions on business performance.
3. Determine the role of Supply Chain integration in mediating the relationship between Supply Chain financing methods and business performance.
4. Investigate How Supply Chain Integration Affects Firm Performance.

1.4 Research Question

The following questions below address the specific objectives stated above.

1. How can an organization identify supply chain finance strategies and practices?
2. What are the impacts of supply chain financing on firm performance?
3. What are the mediating roles of supply chain integration between supply chain financing strategies and firm performance?

1.5 Justification of the Study

The significance of this study lies in its exploration of the intricate relationship between supply chain financing (SCF) and organizational performance within the unique context of manufacturing companies in Ghana's Kumasi and Accra metropolises, listed on the Ghana Stock Exchange and Ghana Club 100. By incorporating the mediating role of supply chain integration, this research addresses a critical gap in the existing literature, aiming to provide multifaceted insights into how SCF strategies impact not only financial accessibility but also operational efficiency and competitiveness. The findings of this study are poised to contribute valuable practical implications

for manufacturing firms by offering a comprehensive understanding of the mechanisms through which SCF and supply chain integration can synergistically enhance organizational performance. Furthermore, the research outcomes can inform policy decisions, assist financial institutions in tailoring support mechanisms, and guide businesses in optimizing their financial supply chain management strategies, ultimately fostering sustainable growth and economic development within the Ghanaian manufacturing sector.

1.6 Summary of Methodology

The research design followed a descriptive and explanatory approach, utilizing a descriptive survey design for data collection. A questionnaire-based approach was employed, personally distributed to manufacturing companies, bankers, and suppliers within the Ghanaian manufacturing sector. A total of 200 SMEs and manufacturing companies within the Kumasi and Accra metropolises, listed on the Ghana Stock Exchange and Ghana Club 100, were sampled using simple random and convenient sampling techniques. Primary data was collected through self-administered questionnaires, while secondary data was sourced from journals and other relevant materials. The questionnaire was designed to meet research objectives and was validated for content. Data analysis involved the use of SPSS software and Mplus, ensuring reliability and validity through careful ethical considerations, consistent administration of questionnaires, and validation by external experts. This approach offers robust insights into the impact of supply chain financing on organizational performance, with implications for policy and practice.

1.7 Scope of the Research

This study focuses on the relationship between supply chain finance and organizational performance, with a specific emphasis on the mediating influence of supply chain integration. Data collection was targeted at 500 SMEs and selected companies listed on the Ghana Stock Exchange and Ghana Club 100, along with suppliers and financial institutions connected to the selected

companies. The research involved personnel such as bankers, supply chain professionals, and suppliers.

1.8 Limitation of the Study

The study data is restricted to the amount to which individuals questioned were prepared to give information that they felt less sensitive, since most respondents saw the exercise as one aimed at finding methods to improve supply chain finance. Access to some firm reports was difficult for the research since they were considered secret.

1.9 Organization of the Study

The study is divided into five parts, beginning with an introduction chapter that describes the study's setting, aims, significance, research questions, and scope, as well as its limits. The second chapter performs a detailed assessment of the literature on supply chain finance. The third chapter discusses the study methodology, which includes data collecting, analytic approaches, and processing processes. The fourth chapter includes data analysis and a discussion of the results in relation to the study's aims and previous literature. Finally, chapter five presents a complete review, makes suggestions based on the results, and wraps up the research by summarising findings..

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter examines the literature on supply chain finance, both theoretical and empirical. However, while studying the literature, the focus would be on the areas that are relevant and practicable to the issue under consideration. This chapter examines supply chain finance solutions and concepts, supply chain management, supply chain integration, supply chain integration benefits to organisational performance and supply chain integration challenges, supplier payment programmes, the current state of supply chain finance, the outlook for supply chain finance, supply chain finance challenges, and the expected relevance that impact manufacturing company performance. The conceptual framework underlying the investigation is also discussed in the chapter.

2.1 Conceptual Review

The conceptual review presents definitions of concepts, types of forms, relationships, advantages, challenges, and pertinent issues in relation to the concepts.

2.1.1 Definition of Supply Chain Management

The supply chain is a complicated network of operations that includes numerous actions performed by the organisation, its suppliers, and its consumers. These activities might be considered inside an organisation as a single complete process or as different processes that jointly turn inputs into final outputs. Supply Chain Management (SCM) is defined by Jespersen and Larsen (2006) as the management of relationships and integrated business processes across the supply chain with an emphasis on delivering value for end customers. "Relations" refers to efforts that build, maintain, and improve relationships with supply chain partners. "Integrated" emphasises cross-functional and corporate collaboration, which is assisted by organisational, systems-related, and planning-

oriented techniques. "Business processes" refer to manufacturing-related operations such as order fulfilment, customer service, product development, and materials management.

Cooper et al. (2006) define SCM as the integration of business activities throughout the whole supply chain, from end users to original suppliers, with the goal of providing consumers with value-added goods, services, and information. Handfield and Nichols (2002) broaden this concept to include all organisations and activities engaged in the movement and transformation of products and information. Their definition of SCM includes integrated supply chain management via cooperative connections, effective business processes, and comprehensive information exchange, resulting in high-performing value systems that provide member organisations with long-term competitive advantages. These viewpoints emphasise the complicated interaction of connections, processes, and integration in the context of supply chain management.

2.1.2 Supply Chain Integration

To achieve a competitive advantage, businesses have actively sought out new business models. Just in Time (JIT), Supply Chain Management (SCM), Theory of Constraints (TOC), and Total Quality Management (TQM) strategies have helped firms to improve production processes, reduce costs, and achieve competitive success across a wide range of business landscapes (Awad et al., 2020). This highlights the critical significance of supply chain integration in improving organisational performance in competitive contexts.

According to Graham C. Stevens (1989), supply chain integration entails bringing together all parties involved in product fulfilment inside a unified system, requiring strong coordination and alignment to assure a common goal. This method not only avoids production delays but also saves time and storage space. Supply chain integration, when done correctly, brings otherwise disparate

parties together to achieve a similar objective by expediting the availability of essential components and promoting efficient product production.

Furthermore, according to Deines (2021), supply chain integration is a complete process that consolidates operations, procedures, and data across the product lifecycle, from development and fabrication through distribution, sales, and servicing, all handled inside a single system. According to Stevens (1989), supply chain integration comprises synchronising team members, corporate units, and trade partners to accomplish common business goals via unified business procedures and information sharing. These perspectives underline the critical role of supply chain integration in improving cooperation, efficiency, and alignment across the product lifecycle, which contributes considerably to organisational success.

2.1.3 Supply Chain Finance

Supply Chain Finance has several distinct meanings. Supply Chain Finance is positioned as a subset of the larger supply chain management concept (Jemdahl, 2015) to help unify the many definitions. Supply chain finance, according to Hofmann (2005), is a strategy used by two or more organisations in a supply chain, including outside service providers, to collaboratively generate value by organising, directing, and managing the flow of financial resources at the interorganizational level. According to Camerinelli (2011), supply chain finance is a group of goods and services that financial institutions provide to help a supply chain's physical movement and information flow. Supply chain finance is also described by Grosse-Ruyken et al. (2011) as an integrated strategy that gives visibility and control over all cash-related operations inside a supply chain.

Supply chain finance solutions and concepts

Supply Chain Finance (SCF) has emerged as an emergent line of literature at the interface of finance and Supply Chain Management SCM studies in recent years.

Supply chain finance (SCF) solutions are a hybrid of technology and financial services that link global value chain (GVC) anchors, suppliers, financial institutions, and, in many cases, technological service providers. They are intended to increase the efficacy of financial supply chains by eliminating negative cost shifting and enhancing visibility, availability, delivery, and cash cost for all global value chain (GVC) players. They are focused on enabling open account trading, which today accounts for 80 percent of global trade. Retailing, automotive, manufacturing, electronics, food and beverage, pharmaceuticals, distribution, heavy equipment, and technology are all well-suited for (and have begun to embrace) Supply Chain Finance (SCF) solutions (Lamoureux and Evans, 2010).

According to Fairchild (2005), organisations' emphasis on upgrading their physical supply chain is only partially effective since money flows are ignored. However, there is little agreement on a single conventional definition of SCF. SCF is distinguished by its emphasis on the integrated management of financial, material, and information flows. Furthermore, the model seeks reciprocal value creation for all supply chain participants (Hofmann and Kotzab, 2010). Few articles provide actual data on SCF practises. The majority of the highlighted SCF practises include some kind of Financial Service Provider (FSP), implying that FSPs contribute to the integrated management of supply chain flows. Furthermore, Seifert and Seifert (2011) highlight financial service providers as essential success elements for SCF practise adoption.

Financial Service Providers' (FSPs') possibilities for responding to customer requirements are analysed and evaluated.

In recent years, the financial system has undergone significant changes, which have impacted the services available to manage supply chain flows (Gupta, 2011). Large banks operate on worldwide markets and may provide more globally oriented products to multinational corporations. However,

new market participants raise competition for conventional commercial banks and broaden the range of offered services.

Supply Chain Finance practises emphasise integrated supply chain flow management. As a result, conventional and integrated SCF practises may be distinguished. Practises include short-term finance, risk management, and trade financing tools. They typically coordinate money movements inside and between organisations (Hofmann and Belin, 2011). However, they seldom address cross-functional or supply-chain cooperation. Asset-based finance, for example, allows for the funding of working capital while reducing financial flow-related aim mismatches. However, it does not need the engagement of firm or supply chain partners. As a result, cross-functional and supply-chain goal mismatches are not always addressed. Integrated SCF practises, on the other hand, encourage collaborative methods inside firms and supply chains. They include, for example, authorised payables finance and advanced inventory financing (Bryant and Camerinelli, 2014). In contrast to typical SCF practises, supply chain participants disclose inventory and payment process information. As a result, 80-100 percent of their receivables or payables are funded at very cheap rates. In order to assist the physical management of stocks, advanced inventory finance might engage a logistics service provider. As a result, integrated SCF practises satisfy corporate requirements for cross-functional and supply-chain goal misfits. The two forms of SCF practises are available from a variety of financial service providers. Commercial banks remain the most significant source of funding in most regions of the globe (Saunders, 2010). Transaction banking, loans, and risk mitigation are the typical tools for managing a company's financial flows (Greenbaum and Thakor, 2007).

Insurance firms reduce the risks associated with managing money flows. They act as a go-between for commercial banks, finance businesses, and other SCF providers to reduce risks. As a result, they play a critical role in allowing FSPs to deliver both conventional and integrated SCF practises. Insurance is necessary for businesses to offset knowledge asymmetry between the parties involved

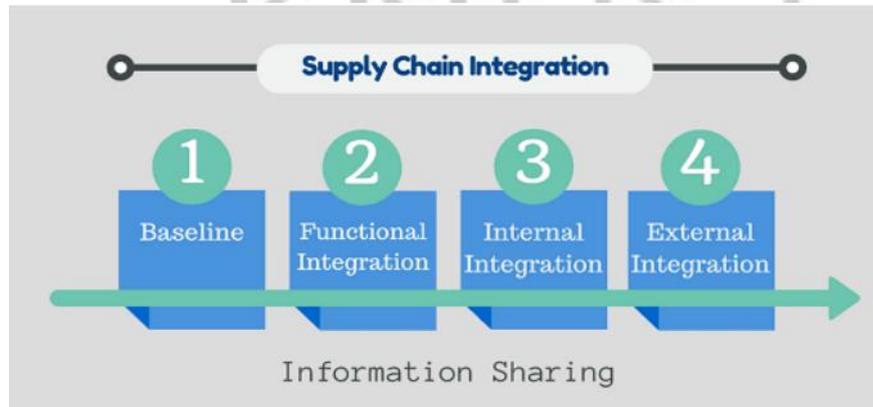
(Gupta, 2011). Nonetheless, they do not supply direct SCF practises to businesses. Technology providers are a new kind of FSP (for example, Global Supply Chain Finance, Prime Revenue, or Orbian). They function as a go-between for funders (such as banks and investment funds), buyers, and suppliers, and are experts in different kinds of integrated SCF practises. As a result, technology companies provide SCF practises that are not tied to a particular sponsor, which is often a bank. To avoid major expenditures on proprietary systems, some commercial banks began collaboration initiatives with platform suppliers. In general, FSPs provide a wide range of SCF practises to businesses. Traditional SCF practises target objective mismatches in financial flows. Integrated SCF practises provide further advantages in avoiding cross-functional and supply-chain goal misalignments. As a result, the FSP acts as an intermediate, reducing trade-offs between participating parties. Commercial banks and financial institutions continue to be the dominant participants in the market for SCF practises. They often already have a long-term commercial connection with their clients and are the initial "contact person" for SCF practises. Nonetheless, other FSPs have become an increasingly prominent driving force in SCF markets. As a result, applicable practises are accessible in financial markets in general to react to financial flow-specific, cross-functional, and supply-chain goal mismatches. The satisfaction of customers is heavily dependent on the service quality provided by FSPs. Because conventional SCF practises have been on the market for many years and have been extensively researched, we will concentrate on the following assessment of integrated SCF practises (Martin and Hofmann, 2017).

2.1.4 Supply Chain Integration Model

The notion of supply chain integration dates back many decades and has been adopted by businesses all over the globe to drastically enhance their systems. According to Stevens (1989),

organisations who manage the supply chain as a single unit will outperform those that do not. He also proposed a four-stage integration paradigm or framework, as seen below.

Figure one (1) – Supply Chain Integration Model



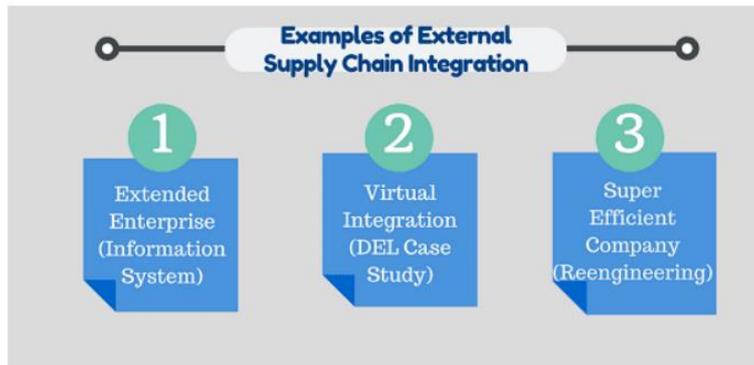
Source: Stevens G. C (1989)

Information sharing occurs at several points in supply chain integration. Companies first function in silos, which is referred to as the Baseline stage. Moving forward, Functional Integration integrates internal divisions to improve efficiency and save expenses via collaborative initiatives. Internal Supply Chain Integration links departments to common systems, often via the use of IT solutions to enhance cooperation and requirements identification. External Supply Chain Integration, the last phase, integrates external suppliers into the process, considering them as within the organisation for best results. These phases show the transition from separated activities to holistic interconnectedness, which fosters increased supply chain performance.

2.1.5 Examples of Supply Chain Integration

The three (3) instances of External Supply Chain Integration listed below can help you comprehend the integration better,

Figure two (2) – Examples of External Supply Chain Integration



Source: Stevens G. C (1989)

Information sharing occurs at several points in supply chain integration. Companies first function in silos, which is referred to as the Baseline stage. Moving forward, Functional Integration integrates internal divisions to improve efficiency and save expenses via collaborative initiatives. Internal Supply Chain Integration links departments to common systems, often via the use of IT solutions to enhance cooperation and requirements identification. External Supply Chain Integration, the last phase, integrates external suppliers into the process, treating them as internal departments for best results. These phases show the transition from separated activities to holistic interconnectedness, which fosters increased supply chain performance. Furthermore, three key principles emphasise the significance of supply chain integration. First, Konsynski's (1993) Extended Enterprise idea explains how information technology efforts erode organisational boundaries, promoting deeper inter-firm ties, and changing marketing and distribution channels. Second, Dell's "Power of Virtual Integration," as reported in a 1998 Harvard Business Review article, exemplifies the revolutionary potential of leveraging information technologies and tight trade partner relationships, as illustrated by the "Direct Model," to drive novel distribution tactics. Finally, Michael Hammer's 2001 idea of a "Super-Efficient Company" emphasises reducing

common operations and using reengineering techniques to improve integration, resulting in increased efficiency in supply chains and cooperative success..

2.1.6 Integrating Supply Chains

In the pursuit of supply chain integration within an organization, the multifaceted process requires meticulous coordination, as emphasized by Stevens (1989). Key steps encompass vendor selection based on timely supply alignment, fostering collaboration among internal teams to optimize system-wide needs and streamline procedures for enhanced efficiency, and addressing waste elimination through strategic relocations. This intricate process, although complex, establishes a foundation for seamless long-term operations, underscoring the significance of aligning various elements to achieve successful supply chain integration.

2.1.7 Challenges and Obstacles of Supply Chain Integration

When it comes to fusing supply chain-specific plans with the broader corporate business strategy, supply chain management (SCM) executives encounter special difficulties. The supply chain has risen in importance on the chief executive officer's (CEO's) list of objectives in recent years due to shifting business realities connected to globalisation. However, such reasons aren't necessarily the best ones. CEOs often only take the supply chain into account when they need to reduce costs or when something goes wrong. Process efficiency on a global scale is crucial to optimised corporate operations since the supply chain basically transports the organization's lifeblood. The value of global integration to Multinational Corporations (MNCs) is derived from the distinct competitive advantage that can be attained from the capacity to take advantage of variations in capital and product markets, to disseminate knowledge and innovation throughout the organisation, and to manage uncertainty in the economic or political environment in various

countries or regions. However, the common perception of the business climate in the majority of sectors is that there is increasing rivalry and unstable economic circumstances. In 2003, Morten.

Awad et al. (2020) explained in their study "Supply Chain Integration: Definition and Challenges" that after reading extensively about the supply chain integration challenges mentioned in various resources, they discovered that some researchers attempt to list the challenges from one perspective while others discuss the challenges from three perspectives, namely the technical perspective, managerial perspective, and realism perspective.

All challenges are combined by Awad et al (2020) into a single complete source that include the following.

Organisational borders and transaction costs become crucial factors to take into account when integrating supply chains. Williamson (1981) asserts that the transaction cost method, which contrasts the expenses of internal and external task management, is crucial in this assessment. This study assists in identifying the best governance structure for coordinating task planning, adaption, and completion monitoring. Companies may optimise their operational processes by comparing the effectiveness and efficiency of internal management vs external partnerships. Using this method, choices are made on whether to outsource or insource certain jobs based on variables including asset specificity, uncertainty, and transaction frequency. As a consequence, businesses may obtain improved resource allocation, simplified processes, and less operational friction.

Supply chain management is critical to strategic success, especially in the face of unpredictability. According to McDermott et al. (1991), supply networks have the innate ability to adjust to changing environmental conditions. Organisations may effectively adjust to changing circumstances while pursuing their goal thanks to this flexibility. Modern customer expectations for customised goods and outstanding service also highlight the significance of efficient customer order management. As suggested by Boxall (1991), collaborative efforts among supply chain partners enable the bundling of personalised solutions. This coordination of resources increases

income while reducing expenses. Companies may succeed in cutthroat industries by meeting unique customer needs and building better connections.

The complexity of multi-site supply networks demands flawless logistical management. Craft (2006) emphasises that effective decision-making requires cross-departmental, comprehensive understanding. Processes are optimised by this orchestration, and goals are met by the results. Jaffer et al. (2004) emphasised the need of seamless integration for effective supply chain management. Integration improves responsiveness to market fluctuations and lowers cognitive constraints by aligning business processes and technology with organisational objectives. According to Karkkainen (2003), such integration is made easier by a culture that emphasises cooperation and flexibility. The success of inter-organizational operations is shaped by accumulated connections and shared experiences inside and across organisations, highlighting the need of a strong culture in supply chain integration.

2.2 Theoretical Review

This section focuses on the investigation of the effects of supply chain finance (SCF) on organisational performance and the function of supply chain integration. Supply chain management (SCM), as defined by Zeng and Pathak (2003), is a complete strategy for controlling material, informational, and monetary flows across the full manufacturing process, from raw material suppliers to final customer. In order to maximise choices and actions, this concept places a strong emphasis on creating tight cooperation among supply chain partners. Porter (1987) noted that successful companies have been collaborating with one another inside their supply chains since the middle of the 1980s. Christopher (1992) furthers this idea by describing SCM as the expansion of integration to include suppliers and customers beyond the bounds of the company.

In order to simplify the management of material and information flows within a supply chain, financial institutions provide a variety of financial products and services known as Supply Chain

Finance (SCF). Suppliers have the opportunity to ask partner financial institutions for money based on specified events or prior to planned settlement deadlines thanks to a common technical platform. Pre-shipment and post-shipment are the two main SCF setups that Lamoureux and Evans (2010) discuss. When the anchor of the global value chain (GVC) issues a purchase order, suppliers may access funds under the pre-shipment arrangement. In post-shipment structures, the GVC anchor's acceptance of a supplier's invoice is what causes suppliers to ask for early, reduced payment.

The relationship between supply chain finance and organisational performance highlights how SCF may improve all operational results. SCF gives suppliers a way to get capital when they need it, promoting efficient operations and reducing cash flow problems. This financial assistance may result in increased manufacturing capacity, shorter lead times, and greater market response. Furthermore, it is important to recognise the mediating function of supply chain integration. As previously discussed in the literature, collaborative integration emphasises seamless collaboration across supply chain participants, which is consistent with the concepts of SCF. By promoting real-time information transmission, enabling improved decision-making, and establishing an atmosphere of trust and collaboration among stakeholders, this integration increases the efficacy of SCF. Organisations are likely to discover new ways to boost performance and gain competitive advantages in the changing business environment as they continue to investigate the symbiotic link between SCF and supply chain integration.

2.2.1 Benefits of Supply Chain Integration

It has become imperative for organizations to integrate their supply chains. The following benefits will show how integration helps businesses conquer supply chain challenges. Singh (2021).

Inadequate cash forecasting may expose firms to overpaying, harming vendor relationships and jeopardising project viability. Integrating the supply chain provides a solution by offering a clear picture of purchase data. This insight allows for accurate cash-in and cash-out estimates, preventing cash shortages. Furthermore, this integration may reveal financial surpluses that may be used to fund value-added activities (Camerinelli, 2009). According to industry insights, such integration-driven insights enable organisations to more efficiently handle financial issues, resulting in smoother operations and proactive financial planning.

Integrating the supply chain also solves overall financial management issues. Procurement's fragmented nature may lead to excessive and inappropriate expenditure. Supply chain integration, on the other hand, provides a consolidated picture of expenditures, enabling for the detection and removal of wasteful purchases. This simplified strategy reduces expenses by consolidating purchases and settling invoices on time (Lamoureux and Evans, 2010). The integration-driven synergy of procurement processes encourages prudent expenditure while reducing the financial burden associated with wasteful spending practises.

A lack of expenditure awareness and manual invoice processing may stifle development and efficiency while also exposing businesses to dangers such as unauthorised purchases and data breaches. Supply chain integration addresses these issues front on by providing real-time monitoring of purchase operations, avoiding unauthorised spending and possible fraud. End-to-end procurement procedures may be optimised with efficient invoicing automation, resulting in faster payment processing and enhanced vendor relationships. Furthermore, integration improves data security by providing safe bridges across systems and decreasing human touchpoints, which often result in mistakes or security breaches. The integration-backed decrease of slowdowns and operational bottlenecks also highlights the revolutionary potential of robotic process automation (RPA) and supply chain integration synergies.

2.2.2 Supply Chain Finance Instruments

We examine the supply chain finance tools typically used in practise in this section. The date of financing, collateral, beneficiary, and credit guarantee provider may be used to differentiate between these instruments;

It is sometimes referred to as "cash in advance" when a customer funds the supplier via an advance payment discount made before the goods is sent. The supplier's unit discount encourages the purchaser to make an early payment, which may be used to the supplier's working capital requirements. Additionally, the early payment might free up the supplier's budget, lowering the danger of a deficit of supply for the buyer. A reputed buyer's (discounted) purchase order serves as the basis for purchase order financing, a practise whereby small and medium-sized company (SME) suppliers get capital from a financial institution prior to product delivery. Interest rates for this kind of financing are based on the supplier's credit score without a guarantee from the customer. Buyer-backed purchase order financing refers to a situation in which the supplier's financing rate is determined by the buyer's creditworthiness and the purchase order financing loan is guaranteed by a reliable customer. Due to the external finance supplied and the buyer's favourable credit standing as determined by a bank, this version enables a SME supplier to contract for a bigger order quantity. A financial institution lends money to a supplier under warehouse receipt finance based on a warehouse receipt that certifies—as portable collateral—the safe storage of a product in a certain amount and quality.

The quantity of the product may be obtained at any moment from the safe storehouse via Supply Chain Finance. The financier extends credit up to a certain portion (the discounted value) of the product that is being stored. Finance supplied by a financial institution to a borrower utilising secured inventory as collateral is referred to as inventory pledge finance. For the purpose of

increasing capacity, replacing outdated equipment, or supplying raw materials, this kind of finance might be employed. Inventory that has been pledged as security for a loan may be used when other forms of company assets are already leveraged. A trade credit clause in a contract stipulates that a buyer will get a discount on the wholesale price if payment is made within a certain amount of time; but, if payment is made later, the buyer will also be responsible for a predetermined interest payment in addition to the (discounted) wholesale price. One of the most popular short-term financing tools in international commerce is trade credit (Rajan and Zingales). Unlike a preset discount rate for a certain number of days and then no discount afterwards, dynamic discounting, which is based on trade credit, entails a discount on the wholesale price that steadily diminishes over time.

With the use of this SCF instrument, the buyer may get a little reduced discount rate after the trade credit contract's early payment term. By selling accounts receivable from a customer at a discount in exchange for quick payment, a supplier may get a line of credit from a bank via the process of factoring. Recourse factoring gives the financier (factor) the authority to demand payment from the supplier for any overdue invoice sums; in this scenario, the interest rate is solely based on the supplier's creditworthiness. In non-recourse factoring, the factor takes on the buyer's risk of non-payment; as a result, the interest rate is influenced by both the credit ratings of the supplier and the buyer. A trustworthy buyer may start a financing plan called reverse factoring to guarantee the transfer of a supplier's accounts receivable to a financial institution. Reverse factoring enables SME suppliers to obtain financing at a more favourable interest rate (than would otherwise be possible) because they are supported by a reliable buyer's consolidated invoice.

Reverse factoring is more common in developed economies where suppliers typically have higher credit ratings. An exporter may sell accounts receivable from an importer to a banking institution (the forfeiture) at a discount. The banking institution assumes the default risk of the importer's

payment by forfeiting "without recourse". This SCF product may convert the accounts receivable of an exporting company into a debt instrument that can be traded on a secondary market. A letter of credit is a document that a bank sends to a supplier promising that, upon receipt of certain papers, the buyer would pay the supplier in a certain amount and on a specific date. A letter of credit may be assignable, meaning that the beneficiary (supplier) may, with both parties' consent, transfer the right to draw on that credit to another company. Usually, the bank issuing the letter of credit requests pledged assets or papers (such as a bill of lading) as security.

2.2.3 Working Capital Management In Supply Chains

The study of working capital management is possible from the perspectives of the supply chain and finance. Working capital (net) is the difference between current assets and current liabilities from a financial perspective. Working capital is defined as inventory plus accounts receivable less accounts payable from the perspective of the supply chain. The cash conversion cycle (CCC), also known as the cash-to-cash (C2C) cycle, is a metric used to assess the performance of working capital. It is defined as the period between when cash is spent to buy inventory for use in production and when money can be obtained from the purchase of the finished product. The typical age of the inventory, the average collection period, and the mean age of accounts payable, netted out, make up this time period, which is expressed in days (Schilling 1996).

2.2.4 Supplier Payment Programs

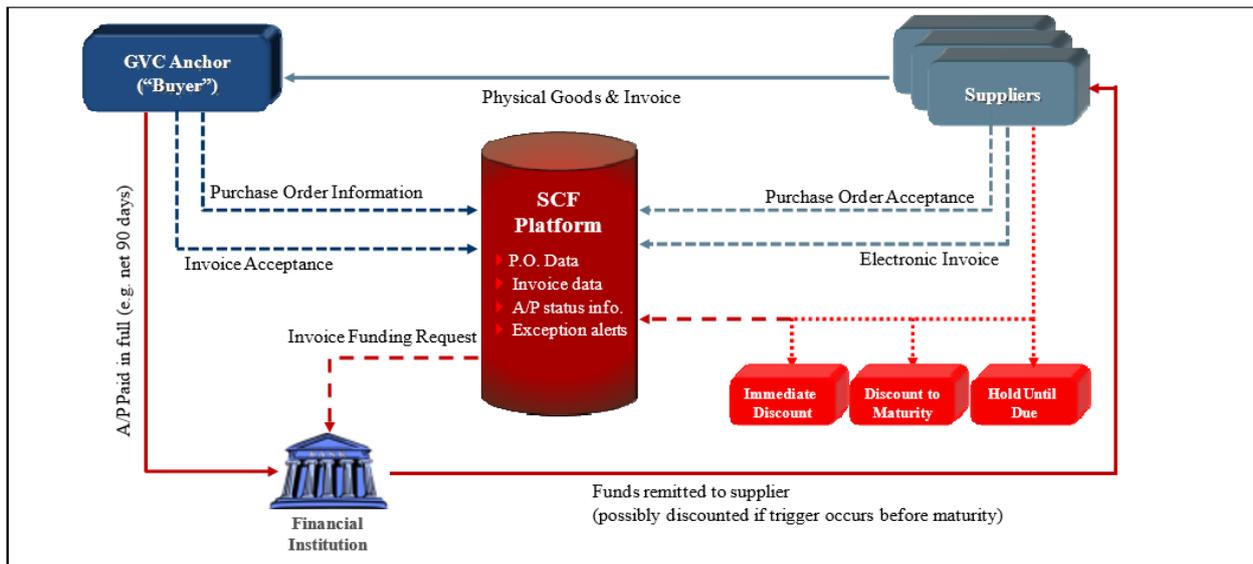
Supplier payment programmes, which are often driven by Global Value Chain (GVC) anchors, are a popular kind of supply chain finance. These programmes include the GVC anchor providing important suppliers with access to its lower cost of capital, allowing for faster payments and cheaper financing costs (Lamoureux and Evans, 2010). The principle is clear, with the goal of improving suppliers' financial capacities. Furthermore, supply chain finance entails the joint

production of value across different organisations within a supply chain, including external service providers. Through collaborative planning, guidance, and control, this inter-organizational method orchestrates financial resource flows (Hofmann, 2005).

Supply Chain Finance (SCF) refers to a variety of financial products and services that aim to improve both physical and information flows throughout a supply chain (Camerinelli, 2009). Suppliers may request funds from participating financial institutions based on specified events or prior to planned settlement deadlines by using a common technology platform. Suppliers may access cash via pre-shipment arrangements after receiving purchase orders from GVC anchors, while post-shipment structures allow for reduced payments after invoice confirmation by GVC anchors (Lamoureux and Evans, 2010). This novel financial method connects capital-limited supply chain enterprises, mitigates financial flow mismatch risk, and produces value inside restricted supply chains (Chen and Hu, 2011).

Supplier payment programmes, which are critical to supply chain finance, are dependent on GVC anchor credit ratings being higher than participating suppliers. When opposed to alternatives like as factoring or standard bank-operated credit lines, these programmes use the face value of invoices for discounting computations, guaranteeing more liquidity (Lamoureux and Evans, 2010). Supply chain finance improves financial mobility and reduces the risk of supply-demand mismatches by bridging the gap between banks and financially restricted enterprises within the supply chain. According to Chen and Hu (2011), this method provides cost reductions and value creation, placing supply chain finance as a novel solution with significant consequences for both financial and operational dynamics.

Figure three (3): SUPPLIER PAYEMENT PROGRAM



Source: Export Development Canada

Supplier payment programmes often use the accepted invoice as a trigger, which is a post-shipment arrangement, rather than the purchase order, which is a pre-shipment arrangement. In the latter situation, financial institutions face more risk since items may not yet be created by the supplier, resulting in higher exposure. Furthermore, revisions to the initial purchase order by the Global Value Chain (GVC) anchor add complications and the possibility of a disagreement between the anchor and suppliers. Due to the inherent risk and complexities involved, purchase-order-based programmes are normally undertaken in solid, well-established commercial partnerships (Lamoureux and Evans, 2010).

2.2.5 Benefits of Supplier Payment Programs

Aside from lowering financing costs, supplier payment programs can provide other advantages to Global Value Chain (GVC) anchors and their suppliers. The table below outlines some of these other operational benefits and summarizes the main financial benefits of supplier payment programs.

Table 1. Benefits of Supplier Payment Programs

BENEFITS FOR GLOBAL VALUE CHAIN (GVC) ANCHORS (BUYERS)	BENEFITS FOR SUPPLIERS	BENEFITS FOR GLOBAL VALUE CHAIN (GVC) ANCHORS AND SUPPLIERS
<ul style="list-style-type: none"> ➤ Increase in DPO and drop in DII. ➤ Cost of goods sold may drop due to lower negotiated input prices. ➤ Cost of processing payments to suppliers decreases as it is now performed by the financial institution. 	<ul style="list-style-type: none"> ➤ Ability to discount purchase orders, invoices or accounts receivable early and with ease. ➤ Ability to obtain more cash at a cheaper rate than through the use of discounts, factoring or a bank line of credit. ➤ Reduction in DSO. ➤ Savings produced by the supplier payment program can help offset the cost associated with a global value chain (GVC) anchor's request to extend payment terms, carry more inventories or reduce prices. ➤ Increase certainty of payment and eliminates the need for credit insurance for sales to global value chain (GVC) anchors. 	<ul style="list-style-type: none"> ➤ Reduction in the cash conversion cycle. ➤ Financing costs decrease. ➤ Helps establish a more collaborative relationship. ➤ Enhances the stability and competitiveness of global value chain (GVC) anchors. ➤ Improved visibility of cash flow achieved through the supply chain finance technology platform. ➤ Better cash flow forecasting. ➤ Supply Chain Finance technology platform encourages automation of financial supply chain processes (e.g. ordering

		invoicing) which can significantly reduce administration costs.
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Source: Lamoureux and Evans, 2010A

2.2.6 Current State of Supply Chain Finance

Supply Chain Finance (SCF) has gained traction, owing partly to the financial crisis; nonetheless, it is still in its early phases (Lamoureux and Evans, 2010). While recent research has mostly focused on banks' incentives and coordinating roles, there is a lack of agreement on regulating procedures among academic circles (Raghavan and Vinit, 2011). Despite their potential advantages, SCF solutions encounter acceptance obstacles among global value chain (GVC) players, with researchers and professionals identifying the causes described below (Lamoureux and Evans, 2010).

Impediments on the demand side: Global value chain anchors and suppliers often lack a comprehensive knowledge of SCF's idea, costs, and advantages, as well as opposition to change. These issues are exacerbated by the costs and efforts needed in enrolling suppliers in SCF programmes, as well as supplier worries regarding programme imposition by GVC anchors. Adoption is further hampered by the difficulties of releasing bank security interests in accounts receivables and integration cost concerns.

Supply-side Impediments: A major supply-side impediment is the restricted availability of full SCF solutions from a few banks, mostly leading global banks. Because of low profits, banks desire large transaction volumes, and many banks avoid non-investment grade risks. Adoption is further

hampered by constraints on upstream and downstream SCF exposures, as well as inadequate technical ability to support SCF operations.

Impediments to Technology/Regulation: The lack of standardised technology in SCF platforms adds complexity and expenses. Inadequate automation and connection in the financial and physical supply chains offer difficulties. Developing technological solutions for numerous SCF forms and trade-related services, as well as worries about electronic security and legality, adds to the challenges. Furthermore, the categorization of accounts payable as bank debt in certain jurisdictions, as well as possible Basel III consequences on capital requirements, may hinder implementation.

2.2.7 The Outlook of Supply Chain Finance

Global value chain anchors and players have been working hard in recent years to optimise cash flows from accounts receivable, accounts payable, and inventories. Given the shaky state of the economy and the limits of typical non-supply chain finance approaches, adopting standard ways for improving the cash conversion cycle seems to be impractical (Lamoureux and Evans, 2010). Organisations seek integration into global trade networks as supply chains spread and adapt across geographies. However, obtaining finance continues to be a substantial barrier, particularly in emerging nations where local banking systems struggle to support new merchants (Aubion et al, 2014). While the operation of the supply chain with cash constraints suggests that supply-based loans are preferable to direct commercial bank financing, achieving this coordination mechanism through trade credit warrants further research (Srinivasa Raghavan and Vinit, 2011; Gupta and Kaushik, 2011; Lee and Byong-Duk, 2011).

The foreseeable future will witness an increase in demand for supply chain finance, owing to its ability to improve cash conversion while minimising negative cost shifts within the value chain.

SCF solution suppliers are expected to focus on serving current firms, acquiring new investment-grade customers, and competing with technological service providers (Lamoureux and Evans, 2010). This progression might include lowering loan interest rates to make implementation easier (Rajamani et al., 2006). As SCF demand grows, non-bank financial institutions are expected to become more active, perhaps resulting in the introduction of new short-term financing alternatives such as The Receivables Exchange. Increased profitability may entice core firms to combine supply chain resources, incurring higher risk and encourage cooperation with small and medium-sized enterprises (Wang et al, 2012).

2.2.8 Technology and Supply Chain Finance

In terms of technology, the industry is anticipated to continue to witness the coexistence of incompatible supply chain finance platforms provided by banks, technology service providers, and in-house built platforms. Corporations and global banks who have made significant investments in supply chain finance technologies want to recover these expenditures, altering the near to medium-term environment (Lamoureux and Evans, 2010). E-commerce platforms that serve as trade platforms as well as integral supply chain participants are an emerging style of supply chain finance. These platforms work with banks to provide credit guarantees to small and medium-sized businesses with little resources (Su and Zhong, 2016).

Multinational corporations have garnered enormous advantages from integrating management operations via the use of Enterprise Resource Planning (ERP) systems, which are backed by shared information systems across the supply chain. Notably, information systems facilitate and integrate commercial operations throughout the supply chain. A critical differentiator in the context of Internet-driven supply chain finance is the entire online completion of transaction and financing procedures for all chain firms. Data from internal systems, e-commerce platforms, and specialised

banking systems geared for inter-organizational and international financial transactions, such as payments, are all integrated in such processes (Blackman et al, 2013; Su and Zhong, 2016).

Maintaining, creating, and updating internal applications may become less justified over time when easily accessible cutting-edge technology may be bought or accessed as managed services at a reduced cost (Lamoureux and Evans, 2010). Automation and improved connection between the physical and financial supply chains are expected to promote the use of supply chain finance technologies.

2.2.9 Challenges of Supply Chain Finance

As organisations strive to preserve competitiveness and financial stability across their supply networks, supply chain finance, although still in its embryonic stages, has significant potential. More and Basu (2013) highlight the broad difficulties connected with supply chain finance in their investigation, segmenting them into six basic areas centred on essential organisational factors. Human Resources (HR), Information Technology (IT) and technical concerns, Finance dynamics, Inter- and intra-firm coordination, cooperation, and alliances, Organisational policies, strategies, and operational practises, and Macro-institutional aspects are examples of these. This categorization provides a complete framework for understanding the various challenges in supply chain finance, challenging organisations to handle these issues holistically in order to optimise their strategy. Recognising and addressing these unique elements is critical for navigating supply chain finance challenges and delivering more streamlined and efficient operational results.. These categories capture the multidimensional character of the roadblocks faced on the way to efficient supply chain finance implementation, spanning everything from internal resources and technology to larger industry and institutional environments. Navigating these hurdles will be critical in unleashing the full potential of supply chain finance to boost operational and financial agility as organisations aim for more efficiency and cooperation throughout their supply chains..

2.2.10 Human Resource-Related Challenges

One of the most significant issues confronting SCF is a lack of understanding and information on SCF programmes among SC managers (Hofmann and Belin, 2011). There is a pervasive dearth of understanding regarding SCF activities among business executives. The main barrier to optimising an organization's working capital is a lack of awareness about SCF best practises. Because of this lack of general understanding, SCF has yet to completely realise its promise in assisting in the management of end-to-end SC costs. Lack of trained employees and training on SCF tools and approaches further complicates SCF deployment (Deloitte, 2009).

2.2.11 IT and Technology-Related Challenges

One of the most significant issues confronting SCF is a lack of understanding and information on SCF programmes among SC managers (Hofmann and Belin, 2011). There is a pervasive dearth of understanding regarding SCF activities among business executives. The main barrier to optimising an organization's working capital is a lack of awareness about SCF best practises. Because of this lack of general understanding, SCF has yet to completely realise its promise in assisting in the management of end-to-end SC costs. Lack of trained employees and training on SCF tools and approaches further complicates SCF deployment (Deloitte, 2009).

2.2.12 Finance-Related Challenges

The broad adoption of SCF is challenged by a number of financial difficulties. Implementing working capital and third-party financing programmes is challenging for SCF providers because to low visibility and a lack of automation in the payment procedures. Cash flows across the SC are inconsistent and unpredictable as a result of all of these factors together. As payments are delayed and the DSO of receivables rises, delays in invoice reconciliation are a particular source of extra

working capital (Hausman, 2005; Lindeen, 2010). Additionally, the supply network's financial parts are not integrated, which creates a number of issues that prevent the network from realising its full economic potential and maximising its efficacy and efficiency (Camerinelli, 2009). The difficulties are additionally exacerbated by the absence of standardised settlement processes via a limited pool of reliable suppliers connected to the cash management systems (Denecker and Helms, 2010). In order to maximise returns for the entire value network, cash management systems that take into account payments to vendors, borrowing for short periods, pledging decisions, and purchases/sales of convertible securities while adhering to budgetary constraints are urgently needed (Croom, 2000; Handfield, 2006; Desai, 2009).

2.2.13 Inter as Well as Intra-Firm Coordination, Collaboration, and Alliance-Oriented Challenges

An key component of successful SCM involves efficient Supply Chain planning based on common information and partner confidence (Horvath, 2001). SCs cannot realise their full potential for contribution if there is no shared vision (Fawcett et al., 2011). If the SC could only be monitored and controlled as a single unified unit, business experts believe that millions of dollars in efficiency savings might be realised. To improve and stabilise cash flows across the Supply Chain, there is, however, a glaring absence of a shared vision among the trade partners in general (More and Basu, 2013). Supply Chain Finance is also severely hampered by a lack of cooperation across several organisational units (Hofmann, 2005). The operations manager often purchases supplies in bulk to get lower pricing, while the financial officer has to make smaller purchases since the company's cash situation necessitates it (More and Basu, 2013).

2.2.14 Organizational Policies, Strategies, and Practices Oriented

As More and Basu (2013) point out, organisational rules often stymie the growth of Supply Chain Finance efforts. Supplier selection in Global Supply Chains is turning into a strategic option, necessitating a redesigned assessment methodology, in the face of ongoing pressure to improve competitiveness and lower finished products prices. Supplier performance has a substantial influence on other Supply Chain partners and the whole system, making operational and financial health equally important in supplier selection. Furthermore, the push from shareholders to increase financial indicators sometimes overshadows discussion of how corporate rules may influence Supply Chain procedures. Economic downturns highlight Supply Chains' susceptibility to their weakest link, emphasising the need of preserving the financial soundness of critical suppliers. Collaborative methods are required, and assessing the consequences of supplier failure and the problem of replacement becomes critical. Effective inventory management practises have financial significance as well, since inventory represents a significant investment with accompanying storage, monitoring, and insurance expenditures. Addressing ineffective inventory management practises as well as business diversity challenges within the organisation and the Supply Chain adds to the complexities (Birou et al., 2011; Randall and Farris II, 2009; Hald and Ellegaard, 2010; Ambrose et al., 2010; Sarkis and Talluri, 2006; Amity et al., 2011).

2.2.15 Macro-Institutional Challenges

Implementing Supply Chain Finance projects has significant hurdles due to macro-institutional elements such geographic distance, cultural diversity, and governmental rules and regulations (Hudson, 2005; Camerinelli, 2009; Siddall, 2010). Therefore, cross-border transactions are inherently complicated and present a number of difficulties, including the use of several currencies, numerous legal systems, and multiple languages. Today's global supply chains must operate across

borders and engage with several nations with various political and cultural histories. The strategy chosen to Financial Supply Chain Management is impacted by legal and cultural variations that exist across and within areas (Flint, 2004; Hofmann and Belin, 2011). The challenges in international commerce originate not just from rising prices but also from the delays and hassles associated with moving products across borders, which may result in poor levels of customer satisfaction and diminished business for trading partners (Sheu et al., 2006; Banomyong, 2007; Marlow, 2010). All of these procedures and laws strain the financial Supply Chains, and as a result, serious Supply Chain disruptions may result from misunderstandings between international partners.

2.2.16 Relevance of Supply Chain Finance

Jemdahl (2015) outlines a number of relevant effects connected to supply chain finance, paying special focus to how it affects organisational performance. The highlighted elements cover a range of strategic advantages, such as improvements in working capital, decreases in processing and administrative costs, efficient use of freed up cash, improved supplier relationships, the use of supply chain finance as a negotiating tool and a way to gain deeper supplier insights, risk mitigation strategies, and benefits given to suppliers. This thorough viewpoint highlights the many benefits that supply chain finance puts to the fore, emphasising how these qualities work together to improve the operational and financial effectiveness of organisations.

2.2.17 Working Capital Improvements

To measure the impact of WC improvements, Seifert and Seifert (2011) discover that a typical company's working capital reduction of 30% results in a 16% rise in after-tax returns on invested capital, which will enhance organisation performance in managing working capital.

2.2.18 Reduced Processing and Administrative Costs

The time spent on administrative chores may be reduced by using Supply Chain Finance to optimise the buying and accounts payables (A/P) procedures. Moreover, permitting the bank to employ direct debit may lower the cost of processing payments. It offers incentives to enhance invoicing since suppliers may (depending on setup) be reliant on their invoices being delivered in the proper way in order to get funding. Due to the demand for the ability to sell invoices to a funder, the focus business might enhance pressure on suppliers to reduce the incidence of invoice errors (Jemdahl 2015).

2.2.19 Utilizing Freed Cash

The corporation is free to decide how to use the money received via SCF. Thus, it may be used to increase sales or cut expenditures. In order to reduce the cost of capital, it might be used to pay off costly debt. Additionally, it may be used to stock buy-back plans or dividends to shareholders. This will have unintended consequences for the economic value contributed. It is the responsibility of the corporation to make sure that the use of the freed cash is producing an economic value impact that adds value to shareholders since this is a business choice like any other with extra cash (Jemdahl, 2015).

2.2.20 Improved Supplier Relations

SCF naturally results in closer and healthier relationships since it is a collaborative technique that requires the customer and supplier to exchange information and trust one another. Furthermore, the interdependence grows since both rely on SCF to achieve the desired working capital gains. The success of SCF with a particular supplier is significantly influenced by the relationship. In order to further improve supplier onboarding with SCF, an integrated buyer-supplier relationship

is advantageous prior to SCF. When suppliers greatly profit from a SCF programme, the focus company will get the suppliers' strong goodwill (Jemdahl, 2015).

2.2.21 Supply Chain Finance (Scf) as A Negotiation Tool and Increased Knowledge about Suppliers

The SCF initiative's wider offering enhances the focus firm's negotiating position. Suppliers may no longer use the claim that the expense of not receiving payment right away prevents them from lowering prices. If suppliers are resistive to SCF, this indicates implicitly how highly they consider capital. This may increase the likelihood of either having a price reduction or raising terms regardless of SCF. In these circumstances, there is also the option of much longer periods with a slight price rise in exchange. Additionally, suppliers may be able to purchase their components and raw materials for less money (owing to better planning due to enhanced cash-flow management as well as a better potential for early payment that renders a discount), which should allow them to cut their rates. The timing of when suppliers opted to be paid under a live SCF programme reveals their financial situation, which might be useful in future negotiations. A stronger negotiating position for the customer may indirectly lower costs with a favourable impact on the economy, whereas the supplier sees a negative impact on sales and, as a consequence, economic value added.

2.2.22 Risk Mitigation

Organisations may build financial resilience within their supply networks by digging into supply chain finance (SCF), an idea underlined by Jemdahl (2015). Notably, the financial health of a supply chain is supported by the financial strength of its key suppliers. SCF emerges as a critical tool in cementing these ties, providing suppliers with affordable financing that improves their working capital and overall financial health. This symbiotic interaction has several benefits:

Improved Supplier Dynamics: Suppliers benefit from faster payment via SCF, allowing them to control material buys and operating expenses. This is especially useful during times of increased manufacturing volume.

Capital Reinvestment: Capital liberation enables suppliers to invest in refining manufacturing capacities, improving product quality, and cutting lead times, so improving overall supply chain efficiency.

Cash Flow Transparency: SCF provides suppliers with regular payment and transparency into their cash flows, supporting greater financial planning and stability.

SCF reduces the risk of suppliers delaying orders due to late invoice payments, resulting in smoother supply chain operations.

Evaluating and integrating SCF principles helps organisations to build heightened financial awareness of supply chain risks. This full understanding improves decision-making, strategy, and overall supply chain resilience, demonstrating a strong connection between financial acumen and operational excellence..

2.2.23 Benefits for Suppliers

Suppliers have the same advantages as the focal firm. On the opposite end of the cash flow, they experience the same result. Receiving payment right away allows them to free up working capital and shortens their Cash Conversion Cycle (CCC). As a result, they need less funding from outside sources. Access to 'loans' outside the balance sheet is what Supply Chain Finance (SFC) is. It reduces their usage of credit while producing credit arbitrage, which may result in lower financing costs than alternatives. Because of the lower CCC, financial cash flow and working capital will both increase. Suppliers will be able to estimate their cash flow better and may opt, for instance,

to sell all of their receivables before closing the books or to automatically finance all of their bills. Suppliers may also be permitted by SCF to pay their suppliers in advance in exchange for a price break. SCF will, for obvious reasons, let more business to the suppliers (raising economic value) if it can help the focal firm expand. The connection will also be reinforced. As they would be able to see in real-time whether the focal firm has delivered bills or not and notify any possible concerns before due dates, suppliers' reconciliation problems should reduce. The empirical research clearly implies that suppliers join SCF for a variety of reasons, and often, suppliers without clear incentives are willing to sign up.

2.3 Empirical Review

An empirical review is a method for learning via both direct and indirect experiences or observations. Either a quantitative or qualitative analysis may be done on empirical data. The researcher makes an effort to precisely characterise how supply chain integration serves as a mediator between access to supply chain finance and organisational performance.

Intricate supply chains are becoming more widespread due to the acceleration of globalisation and competitive pressures. In order to optimise supply chain operations, this phenomena has prompted a greater focus on coordination and cooperation among different stakeholders (Jüttner et al., 2003; Xu et al., 2003; Manuj and Mentzer, 2008; Creazza et al., 2010; Mentzer et al., 2001). However, although supply chain management tactics have received a lot of attention, supply chain finance (SCF) and its substantial effects on industrial organisations have often been disregarded (Pfohl and Gomm, 2009; More and Basu, 2013). SCF has emerged as a way to enable immediate supplier settlements by buyer firms, thereby enhancing supplier credibility and promoting effective financial resource management (Hofmann, 2005; Demica, 2007; Shang et al., 2009; Jongejans et al., 2014). SCF involves the strategic management of financial resources among various organisations.

To resolve obstacles and promote smooth acceptance, a detailed review is required for the effective implementation of SCF programmes. These difficulties include concerns with tax laws and the SCF literature's predominate emphasis on developed countries (Liebl et al., 2016; Wuttke et al., 2013; Caniato et al., 2016). It's important to note, however, that there is a considerable dearth of research that examines the effects of SCF in poor nations, such as Ghana (Song et al., 2018). The novelty and significance of studying SCF in the particular circumstances of emerging countries are highlighted by this gap.

SCF functions as a crucial tool for coordinating material, information, and financial flows in the context of industrial organisations. According to Evans and Koch (2007) and Sadlovska (2007), SCF offers a number of benefits via this alignment, including cost savings, greater supplier stability, continuous supply chains, and improved financial performance indicators. Over the last ten years, SCF has seen a spectacular development trajectory that has been characterised by rising adoption rates and a rise in investigative activities (Aberdeen Group, 2007; Demica, 2008; Kerle, 2008; Cavenaghi, 2013). The growing portion of trade finance income attributable to SCF shows that this development trend is perceptible in both developed and developing countries (Bryant and Camerinelli, 2014; BCR, 2017; Sommer and O'Kelly, 2017).

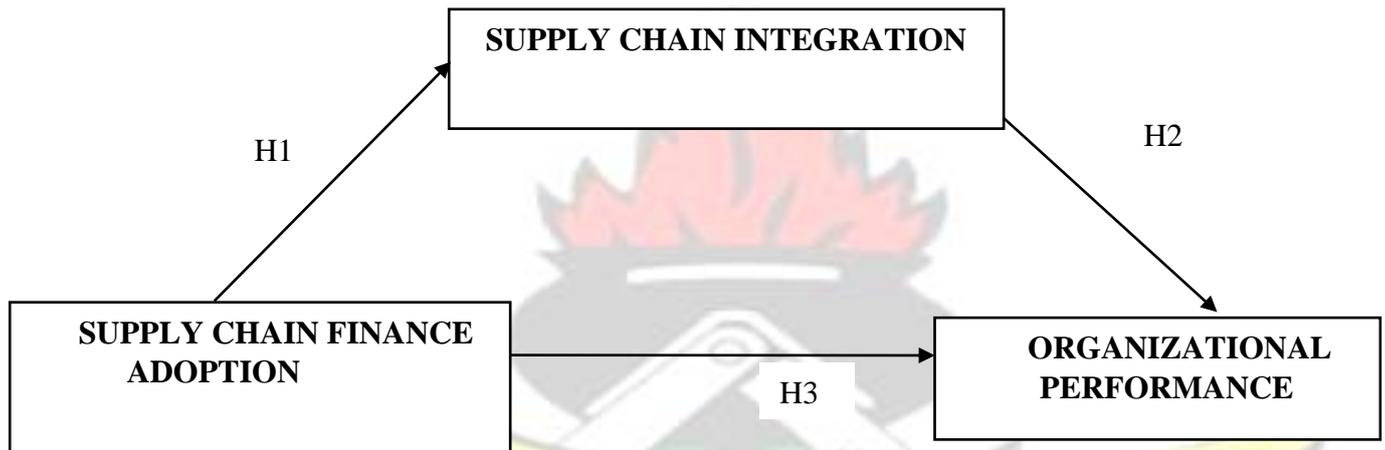
The bargaining dynamics between buyers and suppliers, which greatly influence the balance of power, are a key component in the adoption of SCF (Liebl et al., 2016). Operational, financial, and market metrics—all of which are indicative of the investments made in each organization's supply chain—are closely tied to the performance of manufacturing organisations in the particular context of Ghana (Hunt and Davis, 2008). There is still a significant knowledge gap on how SCF affects the performance of Ghanaian industrial organisations, despite the existence of SCF literature. A critical issue for future study is filling this vacuum and examining the effect of SCF in the Ghanaian environment.

2.3.1 Empirical review table

Study	Research Design	Industry	Data Analysis Method	Key Findings
Chen <i>et al.</i> (2016)	Cross-Sectional study	Hong Kong manufacturing firms	Mathematical Model	Inventory finance can extend credit to downstream enterprise and benefits all members of the chain.
Mingzhu Yu <i>et al.</i> (2014)	Cross-Sectional study	China Ocean carrier Industry	Structural Equation Modelling (SEM) using AMOS 26.0	The carrier is more flexible in the free-space contract system and can receive more profit by using the free-storage-space as a pooling storage system
Zhong <i>et al.</i> (2016)	Cross-Sectional study	China Small and Medium-sized financing enterprises	Structural Equation Modelling (SEM)	Credit risk of small and medium-sized financing enterprises is relatively high due to shortage of its own funds and weak comprehensive ability.
Christopher P. Holland and Timothy Westcott (2012)	Cross-Sectional study	UK Telecommunication Industry	Structural Equation Modelling (SEM)	The financial supply chain is an integral component of Motorola's overall supply chain management strategy
Liebl <i>et al.</i> , 2016	Cross-Sectional study	Financial Industry	Hierarchical liner regression in SPSS 23, Confirmatory Factor Analysis	The bargaining dynamics between buyers and suppliers, which greatly influence the balance of power, are a key component in the adoption of Supply Chain Finance
Shang <i>et al.</i> , 2009	Cross-Sectional study	Financial Industry	SEM using AMOS 26.0	Supply Chain Finance has emerged as a way to enable immediate supplier settlements by buyer firms, thereby enhancing supplier credibility and promoting effective financial resource management

2.4 Conceptual Framework

Below depicts the proposed conceptual framework of the current study that is providing an overview of the impact of supply chain finance on organizational performance.



SOURCE: Researcher's construct (2023)

The above-developed framework illustrates how the successful implementation of Supply Chain Finance measures, which include cooperative relationships, effective and efficient management of supply chain operations, an increase in sales, and information flow or sharing through the mediating role of Supply Chain Integration, will ultimately affect organisational performance. Additionally, the above Hypothesis' major success characteristics for implementing Supply Chain Finance are a strong predictor of improved organisational performance.

2.5 Hypothesis Development

In the context of Ghana, the study effort aims to evaluate how supply chain finance (SCF) affects organisational performance. Three hypotheses were constructed to serve as the conceptual foundation for this investigation and to guide it: The spectrum of SCF actors includes both active

and passive participants. The main participants in the supply chain are customers and suppliers, who trade and cooperate with one another as well as finance companies to raise money utilising SCF instruments. Traditional banks, logistical service providers, non-bank financial institutions, and platform providers are examples of supporting members in contrast. From providing financial services to providing logistical assistance and technology solutions, these players play crucial roles in aiding SCF implementation.

Hypothesis One: Collaborative Relationship and Organizational Performance

The first premise is that improved organisational performance will result from a cooperative connection between supply chain finance partners. This theory is consistent with other case studies that emphasised the financial advantages of adopting SCFs (Liebl et al., 2016; Wuttke et al., 2013). The assumption is that working together will improve supply chain operations, resource management, and general efficiency, which will increase organisational performance. SCF partners include buyers, suppliers, and financial institutions.

Hypothesis Two: Mediating Role of Supply Chain Integration

According to the second theory, supply chain integration's mediating function significantly and favourably affects organisational performance. This is consistent with the results of other studies that highlighted the crucial part that good supply chain integration plays in enhancing corporate performance (Sohail et al., 2009). The easy application of SCF practises is thought to be facilitated by the integration of diverse supply chain partners and roles, which also reduces inefficiencies and improves coordination, eventually improving organisational performance.

Hypothesis Three: SCF Adoption and Multi-dimensional Performance Impact

The use of supply chain finance is hypothesised to improve financial, operational, and customer performance, according to the third hypothesis. This is consistent with the idea that SCF may result in a number of advantageous effects for organisations. Previous research (Grueter & Wuttke, 2017; Hu et al., 2017; Lekkakos & Serrano, 2016; Tanrisever et al., 2012; van der Vliet et al., 2015; Wuttke et al., 2016) has shown that SCF may favourably affect sales, enhance production to match customer demand, and contribute to better cash flows. Together, the effects of SCF on financial KPIs, operational effectiveness, and customer satisfaction help to improve overall organisational performance.

Hypothesis One (H1): A collaborative relationship between supply chain finance partners will have a positive impact on organizational performance.

Hypothesis Two (H2): The mediating role of supply chain integration has a significant and positive effect on organizational performance.

Hypothesis Three (H3): The adoption of supply chain finance has a positive effect on financial, operational, and customer performance.

CHAPTER THREE METHODOLOGY

3.0 Introduction

Research methodology is a technique and procedure used to obtain and analyze research data. It is an exploratory approach to data collection and helps to give detailed insight to the problem. In effect, the methodology is planning a research process. The research approach employed in the study is discussed in this chapter. The study's design, as well as the demographic and sample size, have all been reported. The instrument used to collect the data, as well as the techniques utilised to maintain the instrument's validity and reliability, are detailed. It also discusses the measures used to allow the research to be measured.

3.1 Research Design, Strategy and Approach

The strategy and organisation of an inquiry created to find answers to research questions is known as the research design. A descriptive and explicative strategy was used. We employed a descriptive survey design. For characterising a population that is too big to be observed directly, a survey is utilised to gather original data (Mouton, 1996). In a survey, a sample of individuals reply to an array of questions presented by the researcher and provide information about themselves (Polit and Hungler, 1993). In this study, data were gathered through self-administered questionnaires that the researcher physically gave to respondents. The choice of a descriptive survey was made because it offers an accurate representation of the traits, for instance, behaviour, views, talents, beliefs, and knowledge of a certain person, circumstance, or group. The study's goals, namely to ascertain the expertise and opinions of the senior management of a few Ghanaian manufacturing businesses registered on the stock exchange of Ghana and Ghana Club 100, as well as those of several bankers and suppliers, led to the selection of this design.

3.2 Population of the Study

A population is defined by Burns and Grove (1993) as all components that fulfil the sample requirements for inclusion in research. The research population included supply chain specialists from 200 SMEs and manufacturing enterprises in Ghana's Kumasi and Accra metropolises that are listed on the Ghana Stock Exchange and the Ghana Club 100, as well as bankers and suppliers.

3.3 Sample Size and Sampling Techniques

Sampling is an important part of any inquiry and requires numerous considerations. The majority of investigations seek information on a population. For analysis, a census or sample of the population is obtained. This study's sample approaches were basic random and convenient sampling techniques. The manufacturing enterprises were chosen using a standard random sample approach; however, convenience sampling was employed to choose company owners/managers who were conveniently accessible at the point of data collection. The study's sample size was 200 SMEs and manufacturing companies. The sample was chosen at random, as well as depending on the respondents' preparedness and availability. According to Pallant (2007), even if the replies are not normally distributed, a sample size of 30 or more does not violate or present severe issues in statistical measurements.

3.4 Sources of Data

The research used both primary and secondary data. Questionnaires were used to gather primary data, while secondary data was acquired from other sources such as the World Wide Web, journals, and other material. The goal of gathering secondary data was to aid in the formulation of issues, the examination of literature, and the development of a questionnaire.

3.4.1 Primary Sources

Primary data is information gathered by the researcher to meet a specific need outlined in the study goals. The survey technique of research was used for this study. The approach utilized to collect data was a self-administered questionnaire.

3.4.2 Secondary Sources

The researcher collected information from both public and unpublished sources. To complement the study, data was acquired from journals, books, and other sources, as well as many relevant studies regarding supply chain financing inside the business.

3.5 Data Collection Methods and Instruments Used

The major data collecting instrument for this research was a questionnaire, that is a self-report form meant to acquire information from participants via written replies, similar to interviews but with fewer in-depth questions. These surveys were used to gather data on the subject area expertise and viewpoints of both management and personnel. The questionnaire was intentionally designed to correspond with the aims of the research rather than being lifted from earlier efforts, assuring relevance. Several factors influenced the decision to use questionnaires: they resulted in a high response rate due to the researcher's personal distribution and collection, necessary less time and effort to execute, allowed for anonymity, minimised any potential prejudice through in keeping appearance, and displayed mostly closed-ended items, allowing for easier response comparison. However, there are certain disadvantages to using questionnaires, such as questions regarding validity and accuracy. Respondents may not share true views in order to appease the researcher, and brief responses may result in the loss of vital information.

3.6 Data Analysis

The researcher personally gave questionnaires to the chosen industrial organisations for completion. The information was gathered over the course of one month. To learn about the operations of these industrial organisations, the researcher questioned some of their employees and suppliers. As a result, questionnaires were created for the responders. The researcher initially ran the questionnaire through a pilot test to confirm that the goals were satisfied. The questionnaires were circulated once they had been corrected.

3.6.1 Data Collection Process

Before gathering data, the researcher visited the study area to become familiar with the surroundings, then chose at random some manufacturing businesses in Ghana that are traded on the Ghana Stock Exchange and the Ghana Club 100, as well as some bankers and suppliers, with the goal of establishing a rapport with the managers and outlining the study's objectives. The researcher made an effort to encourage respondents for finishing and submitting the questionnaire in his or her presence in order to increase response rates and answer any questions that could have come up. Before respondents filled out their replies, the questions were explicitly explained to them as part of the plan. Several people insisted on returning the questionnaires later or chose to answer the questions so the author could input the answers. The primary work was preceded by a pre-test of the questionnaire. The pre-test activity's goal was to make sure the questions were suitable for the primary fieldwork, relevant, and simple to understand. Through the exercise, the researcher was able to appropriately prepare the questionnaire questions for the main task and have a better understanding of them. A pilot test was conducted to enhance the question order, question filtering, and layout due to the complexity of the questionnaire design.

3.6.1.1 Variable Description and Measurement

Table 1 Variable Description and Measurement

Construct	Sub Construct	Measurement	No. of items	Reference
Adoption Factors	Supply Chain Finance	SCF 1 SCF 2 SCF 3 SCF 4 SCF 5	10	Liebel et al., (2016)
Adoption Factors	Supply Chain Integration	SCI 1 SCI 2 SCI 3 SCI 4 SCI 5	7	Lamoureux and Evan (2010) Camerinelli (2009)
Influence Factors	Operational Performance	OP 1 OP 2 OP 3 OP 4 OP 5	10	Wuttke et al., (2013)

3.6.2 Methods of Data Analysis

According to Sullivan (2001), data analysis may be the most difficult and fascinating part of research. It is getting meaning out of the data that was gathered for a research. Data analysis takes many different shapes. In order to create meaning from quantitative data, statistical procedures are used to collect, organise, categorise, and summarise the data. As previously mentioned, the author used questionnaires to perform field research to gather information from the chosen industrial organisation. Following the data gathering, data reduction was carried out to choose, organise, concentrate, refine, and summarise the data for further analysis. The gathered information was changed into a format suitable for modification and analysis. Editing was done on the data collected from the questionnaire to make sure it was accurate, consistent, and comprehensive. Mplus and the Statistical Package for Social Sciences (SPSS) programme were used to analyse the data that had been gathered. Tables and figures were used as analytical tools while analysing the data. To provide sense to the data and illuminate its ramifications, quantitative interpretations were produced. Using

these, relevant deductions and suggestions were drawn from the study's results.

3.7 Reliability and Validity of the Study

The research prioritised ethical concerns, assuring participant comfort and voluntary participation while maintaining anonymity. To avoid hardship and shame, ethical framing guided research queries. Content validity was addressed by including several questions concerning supply chain finance's influence on manufacturing business performance in Ghana. To achieve representative coverage, questions were linked with the results of the literature review. The researcher's constant and personal administration of surveys supported the content validity. Clear, understandable language and advice were used, and the researcher aided in situations of illiteracy. To avoid proxy submissions, respondents completed surveys in the presence of the researcher. Other experts were participated in external validation, which improved question quality and coverage. Closed-ended questions with several answer options aided in meaningful data analysis while keeping to established norms (Burns and Grove, 1993).

3.8 Ethical Consideration

The researcher is expected to treat participants with respect to carry out ethical research. This suggests that participants should be well educated about how they contribute to the study and generate less foreign exchange. SMEs actively promote local expertise through their operations.

3.9 Profile of the Study Area

Small and medium sized enterprises (SMEs), corporate entities and multinational corporations make up Ghana's economy. Together, they create the framework for the economy's growth and commercial activities. The SME sector is primarily responsible for driving the government objective to make the private sector the engine of growth and development. Almost 70% of the

country's GDP is generated by the SME sector. SMEs have over the years played a major role in the economic growth of most emerging nations, particularly to Ghana's GDP growth.

The issue of the relationship between banks and their small business clients has recently attracted significant academic attention in addition to being discussed on several occasions, which has resulted in the establishment of significant government support to supplement already existing support (Bodenhorn, 2003). Additionally, Hernandez-Canovas and Martinez-Solano (2007) contend that strong ties to financial institutions may result in benefits including better restricted growth. Other SMEs also bemoan the lengthy banking processes and challenges they face when applying for bank loans. Others also voiced their displeasure with the banks' exorbitant interest rates. According to Kusi et al; (2015), 38% of Ghanaian SMEs questioned identified credit as a barrier. Moreover, Aryeetey (2010) noted that only half of SMEs in Ghana who applied for formal financing, such as bank loans, had any chance of being accepted. He also noted that approximately two-thirds of micro enterprises' loans are likely to be rejected. However, most SMEs lack professional training in their fields of endeavor.

In Ghana, the manufacturing industry is crucial to the country's economy as well as the larger West African sub-region, notably in the areas of consumer and industrial goods and services. The industry is poised for tremendous growth, supported by new government policies meant to promote a favourable business climate, thanks to a strong customer base and a rising focus on manufacturing and exports. The creation of free zone regions has fueled this expansion by luring both global firms and regional medium-sized businesses like Unilever, Coca-Cola, Toyota, and Accra Brewery. Ghana has attracted international investors from all across the sub-region due to its political stability since 1992 and stable macroeconomic environment, which have further spurred investment.

CHAPTER FOUR

PRESENTATION OF RESULTS, ANALYSIS AND DISCUSSION

4.0 Introduction

The emphasis in this chapter is on data presentation, data analysis, and discussion of results. The findings were presented, analysed, and discussed in line with the study objectives and hypotheses. The impact of supply chain finance on organisational performance and the function of supply chain integration as a moderator. Furthermore, the research focused on the demographics and features of the companies from which the respondents were selected.

4.1 Demographic and Firm Characteristics

The study examined both socio-demographic and firm-level characteristics. The socio-demographic variables examined in this study include gender, age, and position. Firm level variables include, organizational tenure, category of the industry, company existence, and the number of employees in the organization.

The results which are indicated in the Table below showed that there are more males (60.0%) compared to females (40.0%). Also, the age distribution shows that majority of participants are within the 31-35 years' age group, followed by 36-40 years (20.5%), 26-30 years (19.0%). Again, 16.0% were above 41 years and 7.5% were with 20-25 years of age. The positions held by participants was in four categories. Consequent to this, majority of the participants constituting 46.5% were middle manager or head of department staff, 33.5% were junior managers, 12.5% were senior managers or directors and 7.5% were technical assistant of the respective companies sampled for the study. This implies that respondents had ample experience or knowledge about the organisations they answered questions. This makes their responses more reliable.

With regards to the firm level analysis, 22.5% of the organizations reported that they have been actively working within the industry for less than 5 years, 33.0% have been actively working

for about 6-10 years, 26.0% of the organizations have been working within the industry for about 16-20 years, 16.0% of the organizations have been actively working within the industry for about 16-20 years and 2.5% have working experience more than twenty (20) years. while 37.0% reported their existence between 21-30 years, 25.0% reported their existence between 11-20 years, 21.5% reported their existence for less than 10 years, 10.5% reported their existence between 31-40 years and lastly, 6.0% reported their existence for more than 40 years. The firm size analysis showed that most organisations (22.0%) had over 301 employees, 21.0% had 200-300 employees, 16.5% had 401-500 employees. In addition, 16.0% of the organisations had 100-199 employees, 13.5% of the organizations had less than 100 employees and only 11.0% had more than 500 employees.

Again, 16.0% of the organisations were in the banking and finance industry, 27.0% of the organizations were in the manufacturing industry, 17.5% of the organizations were into food and agriculture, 19.0% of the organizations were in the oil and gas industry, 10.0% of the organizations were in the media and broadcasting and lastly 10.5% were in the transportation and logistics.

Table 4. 1 Demographic and firm characteristics (N = 200)

Items		Frequency	Percent (%)
Respondent Demographic Characteristics			
Gender	Male	120	60.0
	Female	80	40.0
Age (in years)	20-25 years	15	7.5
	26-30 years	38	19.0
	31-35 years	74	37.0
	36-40 years	41	20.5
	41 years and above	32	16.0
Position/role	Senior manager	25	12.5
	Middle manager	93	46.5
	Junior manager	67	33.5
	Technical assistant	15	7.5
Firm Characteristics			
Firm size	Less than 100 employees	27	13.5
	100-199 employees	32	16.0
	200-300 employees	42	21.0
	301-400 employees	44	22.0
	401-500 employees	33	16.5
	Above 500 employees	22	11.0
Organizational tenure (in years)	Less than 10 years	43	21.5
	11-20 years	50	25.0

Items		Frequency	Percent (%)
	21-30 years	74	37.0
	31-40 years	21	10.5
	Above 40 years	12	6.0
Industry	Banking and finance	32	16.0
	Manufacturing	54	27.0
	Food and agriculture	35	17.5
	Oil and gas	38	19.0
	Media and broadcasting	20	10.0
	Transportation and logistics	21	10.5
Actively working	Less than 5 years	45	22.5
	6-10 years	66	33.0
	11-15 years	52	26.0
	16-20 years	32	16.0
	More than 20 years	5	2.5

Source: Field data, 2023

4.2 Descriptive Analysis

Constructs that were of importance to this study include supply chain finance, organizational performance, the effect of supply chain finance, factors influencing supply chain finance, and supply chain integration. Responses were scored on a Likert scale with 1 being strongly

disagreed and 5 being highly agree (5). Based on the average mean and standard deviation, the scores were computed descriptively.

4.2.1 Supply Chain Finance

Supply chain finance was created utilising eight Likert Scale components. All comments were scored on a five-point scale, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating highly agree. The mean score of 3.490 with a standard deviation of 0.868 indicates that respondents either somewhat disagreed or agreed that the organisation may receive more cash at a lower cost than via discounts or a bank line of credit. Again, respondents either somewhat disagreed or agreed that the cost of items supplied may fall as a result of lower negotiated input costs. However, respondents agreed that cash flow forecasting should be improved. This study's respondents also believed that finance costs are decreasing. Overall, respondents agreed with the claims in the supply chain finance section.

Table 4.2: Supply chain finance

Statement	N	Min	Max	Mean	SD
The cost of processing payments to suppliers decreases as it is now performed by the financial institution	200	1.00	5.00	3.300	1.012
The cost of goods sold may drop due to lower negotiated input prices	200	1.00	5.00	3.305	0.978
Ability to discount purchase orders, invoices, or accounts receivable early and with ease	200	1.00	5.00	3.470	0.862

Ability to obtain more cash at a cheaper rate than through the use of discounts or a bank line of credit	200	1.00	5.00	3.490	0.868
Financing costs decrease	200	1.00	5.00	3.595	0.875
Helps establish a more collaborative relationship	200	1.00	5.00	3.760	0.738
Enhances the stability and competitiveness of the Global Value Chain (GVC).	200	1.00	5.00	3.780	0.765
Better cash flow forecasting	200	1.00	5.00	3.810	0.753

4.2.2 Organizational Performance

Eight elements on the Likert Scale were used to improve organisational performance. All comments were scored on a five-point scale, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating highly agree. The mean score of 3.750 with a standard deviation of 0.813 indicates that respondents generally felt that supply chain activities are effective and efficient. Respondents agreed on whether or not there has been an improvement in working capital. Respondents also believed that supply chain finance as a bargaining tool has improved, as has information about suppliers. In addition, respondents agreed that supplier interactions with organisations had improved. In general, respondents agreed with the comments about organisational performance.

Table 4.3: Organizational performance

Statement	N	Min	Max	Mean	SD
Effective and Efficient in Supply Chain Operations	200	1.00	5.00	3.750	0.813
Improvement in working capital	200	1.00	5.00	3.860	0.789
Reduce processing and administrative cost	200	1.00	5.00	3.850	0.800
Meet Lead time Periods	200	1.00	5.00	3.935	0.730
Improved supplier relations with organizations	200	1.00	5.00	3.950	0.775
Improves Supply chain finance as a negotiation tool and increased knowledge about suppliers	200	1.00	5.00	3.805	0.806
Mitigates risk	200	1.00	5.00	3.740	0.852
Meets Production targets	200	1.00	5.00	3.890	0.762

4.2.3 Effect of Supply Chain Finance Practices

Eight Likert Scale questions were used to develop the effect of supply chain finance practise. All comments were scored on a five-point scale, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating highly agree. The mean result of 3.025 with a standard deviation of 0.792 indicates that respondents either somewhat disagreed or agreed that the cost of items sold had increased. Again, the respondents slightly disagreed nor agree that there is improvement in profitability relative to total assets in generating earnings. Again, the respondents slightly agreed nor disagreed that there is increase

in organizational cash flow. Overall, the respondents slightly disagreed nor agreed with the statements under supply chain finance practices.

Table 4.4: Effect of supply chain finance practices

Statement	N	Min	Max	Mean	SD
Increase in cost of goods sold.	200	1.00	4.00	3.025	0.792
Decrease in cost of goods sold	200	1.00	4.00	2.990	0.833
Increase sales.	200	1.00	4.00	3.310	0.613
Improve profitability relative to total assets in generating earnings	200	1.00	4.00	3.325	0.665
Achieve positive return on investments	200	1.00	4.00	3.375	0.683
Increase in organizational cash flow	200	1.00	4.00	3.380	0.614
Increase in inventory turnover	200	1.00	4.00	3.350	0.616
Improves overall supply chain operations	200	1.00	4.00	3.225	0.690

4.2.4 Factors Influencing Supply Chain Finance

Five Likert Scale questions were used to construct factors impacting supply chain finance. All comments were scored on a five-point scale, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating highly agree. The mean result of 3.150 with a standard deviation of 0.728 indicates that respondents either somewhat disagreed or agreed that information exchange in the supply chain allows for more accurate and timely business decisions. In response to the topic of whether the use of supply chain finance improves the operational efficiency of both sellers and buyers, respondents either

somewhat disagreed or agreed. The respondents also slightly disagreed nor agree supply chain financing can only be adopted through seamless flow of both physical and non-physical assets among all firm stakeholders. Overall, the respondents moderately agree with the statements under factors influencing supply chain finance.

Table 4.5: Factors influencing supply chain finance.

Statement	N	Min	Max	Mean	SD
The adoption of supply chain financing is geared towards improving the operational efficiency of both sellers and buyers	200	1.00	4.00	3.175	0.719
Information sharing in the supply chain enables accurate and faster business decision making	200	1.00	4.00	3.150	0.728
Improves banks' willingness to issue payment terms extension and reduce costs among trading partners	200	1.00	4.00	3.145	0.697
Encourages close collaborations between stakeholders (banks and suppliers) in enhancing the performance of supply chain operations	200	1.00	4.00	3.175	0.661
Supply chain financing can only be adopted through seamless flow of both physical and non-physical assets among all firm stakeholders	200	1.00	4.00	3.145	0.660

Improves information transparency by Banks and can facilitate the alignment of sound supply chain financing performance	200	1.00	4.00	3.240	0.619
Enables the adoption of technology that is capable of aligning banks and suppliers' operations to improve internal supply chain development	200	1.00	4.00	3.210	0.598
Helps to utilize supplier information in updating supply trade information to improve overall supply chain finance	200	1.00	4.00	3.200	0.585

4.2.5 Supply Chain Integration

Supply chain integration was created utilizing eight Likert Scale components. All comments were scored on a five-point scale, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating highly agree. The mean score of 3.525, with a standard deviation of 0.641, indicates that respondents generally believed that effective communication exists. With regards to the question whether the organization promotes long-term relationship, the respondents strongly agreed. However, the respondents also slightly disagreed nor agree that there is supplier (procurement) performance. Moreover, the respondents slightly disagree nor agreed that there is external logistics integration. Again, the respondents slightly disagreed nor agreed that there is strong supplier base. Overall, the respondents slightly disagreed nor agreed with the statements under supply chain integration.

Table 4.6: Supply chain integration

Statement	N	Min	Max	Mean	SD
Effective Communication	200	1.00	4.00	3.525	0.641
Promotes long-term relationship	200	1.00	4.00	3.580	0.543
Information technology	200	1.00	4.00	3.155	0.978
Strong Supplier base	200	1.00	4.00	3.470	0.617
Cross-functional teams	200	1.00	4.00	3.425	0.579
Supplier integration	200	1.00	4.00	3.415	0.612
External logistics integration	200	1.00	4.00	3.375	0.613
Supplier (Procurement) performance	200	1.00	4.00	3.425	0.613

4.3 Reliability Tests

According to Field (2009), the reliability test is best determined using the Cronbach alpha which seeks to test the internal consistency of the items the variables intend to measure. It is based on this that the current study used Cronbach's alpha to test for the internal consistency of the variables. It was found that all the variables achieved strong internal consistency coefficients with supply chain finance at 0.886, the organizational performance obtained 0.879, effect of supply chain finance had 0.840, factors influencing supply chain finance recorded a Cronbach alpha score of 0.877, and supply chain integration obtained a Cronbach alpha value of 0.840. Results have been presented in Table 4.3. According to Hulin, Netemeyer and Cudeck (2001) cited in Ursachi, Horodnic, and Zait (2015) the generally accepted rule is that α of 0.6 to 0.7 are acceptable reliability levels, ≥ 0.8 are very good.

Table 4.7 Reliability tests

Constructs	Number of items	Cronbach alpha (α)
Supply chain finance	8	0.886
Organizational performance	8	0.879
Effect of supply chain finance	8	0.840
Factors influencing supply chain finance	8	0.877
Supply chain integration	8	0.840

Source: Field data, 2023

4.4 Correlational Test

The Pearson correlation coefficient was used in a correlation test to establish the strength of the link between the variables studied in this research (r). Age and gender were used in addition to socio-demographic characteristics. The primary variables evaluated in the investigation were Supply Chain Finance, Organisational Performance, Supply Chain Finance Effect, Factors Influencing Supply Chain Finance, and Supply Chain Integration. A number of zero shows no link, whereas a value of one implies perfect positive correlation. For the purposes of multicollinearity, it was realized that the models adopted for the study were free of errors with regards to multicollinearity (Hair *et al.*, 1998) since none of the observed connection exhibited a Pearson correlation value more than 1.0. It was realized in Table 4.4 that all the constructs had positive and significant relationships with each other.

Table 4.8: Pearson's Correlation result

Variables	1	2	3	4	5	6
1 Gender						
2 Age	-.186**					
3 Supply chain finance	.034	-.126				
4 Organizational performance	.089	-.036	.559**			
5 Effect of supply chain finance	.093	-.122	.535**	.403**		
6 Factors influencing supply chain finance	.066	-.073	.550**	.455**	.562**	
7 Supply chain integration	.209**	-.078	.384**	.443**	.529**	.555**

**&* Signifies Correlation at the 0.01 level and 0.05 level (2-tailed) respectively

4.5 Hypothesis Testing

This section of the chapter tests the hypothesis established in the study;

4.5.1 Supply Chain Financing Strategies and Firm Performance

The data in the table below show the association between supply chain financing strategy and business performance using regression analysis. The model demonstrates a positive association between supply chain financing strategy and business performance, with an R-squared value of 0.162, implying that firm performance can explain 16.2% of the variance in supply chain financing strategy.

The regression model is significant ($F = 38.400$, $p 0.001$), demonstrating that supply chain financing strategy has a significant influence on business performance, according to the table.

According to the standardised coefficient, supply chain finance strategy has a significant

positive influence on business performance. This suggests that improving supply chain finance strategy would result in a 40.3% improvement in business performance. According to the regression study, there is a significant positive association between supply chain finance strategy and business performance.

Table 4.9 Regression analysis on the effect of supply chain financing strategy on firm performance

Model	Unstandardized Beta	Std. Error	Standardized Coefficients Beta	T	Significance
(Constant)	2.244	.262		8.580	.000
Supply chain financing strategy	.494	.080	.403	6.197	.000
Model Summary R = .403 R ² = .162 Adjusted R ² = .158 Std. Error of the Estimates = .53474 F = 38.400*					

Dependent Variable: Firm performance

*Significant at 5%

Source: Field Survey, 2023

4.5.2 Supply Chain Integration and Firm Performance

A simple linear regression analysis was performed among them to analyse the influence of supply chain integration on firm performance, with supply chain integration as the independent construct and firm performance as the dependent construct. The r-squared value is the fraction of variation in the dependent variable that the independent variable may show. The regression model's results revealed a significant and positive association between supply chain integration and firm performance, with supply chain integration accounting for about 19.6% of the variability in company performance. The analysis of variance was used to determine if the model is a good fit for the data. The significance level was determined to be 0.000, which is less than 0.05, showing that the model or depiction is accurate in predicting how supply chain integration affected business performance. Finally, the model predicts that a unit improvement in supply chain integration would result in a 44.3% rise in firm performance. According to the findings of the present study, supply chain integration improves company performance.

Table 4.10 Regression analysis on the effect of supply chain integration on firm performance

Model	Unstandardized Beta	Std. Error	Standardized Coefficients Beta	T	Significance
(Constant)	1.906	.282		6.759	.000
Supply chain integration	.568	.082	.443	6.949	.000
Model Summary R = .443 R ² = .196 Adjusted R ² = .192 Std. Error of the Estimates = .52390 F = 48.283*					

Dependent Variable: Firm performance

*Significant at 5%

Source: Field Survey, 2023

4.5.3 Mediating Effect of Supply Chain Integration

The table below displays the direct and indirect outcomes. In this research, the mediation impact of supply chain integration in the link between supply chain finance strategy and organisational performance has a significant positive association. Between the lower-level limit confidence level and the upper-level limit confidence level, there is a zero. This implies that both the direct and indirect paths are significant, indicating that this is a complete mediation. This suggests that a supply chain finance strategy has an effect on organisational performance only if there is no supply chain integration. This implies that when supply chain integration is present, the direct influence of supply chain finance strategy on organisational performance is low, however the indirect effect is significant.

Table 4.11 Process Macro analysis for supply chain integration as a mediator

	B	SE	T	P	LLCI	ULCI
Direct effects						
Dependent variable: OP						
Supply chain financing strategy	.2873	.0899	3.1949	.0016	.1099	.4646
Supply chain integration	.4087	.0941	4.3439	.0000	.2231	.5942
Dependent variable: SCI						
Supply chain finance practice	.5054	.0577	8.7663	.0000	.3917	.6191
Indirect effect						

SCFS→SCI→OP	.2065	.0656			.0844	.3466
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Note: SCI = Supply Chain Integration, SCFS = Supply Chain Financing Strategy, OP = Organizational Performance LLCI = Lower-level confidence interval, ULCI = Upper-level confidence interval.

4.6 Discussion of Results

4.6.1 Supply Chain Financing Strategy and Firm Performance

The research looked at the connection between supply chain finance strategy and business performance. With an R-squared value of 0.162, the model shows a positive association between these two variables. This result suggests that differences in business performance account for roughly 16.2% of the variability in supply chain financing strategy. The significance of the regression model is validated by an F-statistic of 38.400 and a p-value less than 0.001. This finding demonstrates that the supply chain financing strategy has a significant impact on business performance. The standardised coefficient emphasises this effect even more, demonstrating a positive association. In practise, increasing the supply chain financing approach leads to a 40.3% improvement in business performance. Overall, the results of this regression study show that there is a significant positive association between supply chain financing strategy and business performance. The study's discovery of a positive and statistically significant association between supply chain finance strategy and business performance is consistent with previous studies. Because global supply networks are complex and dynamic, it is critical to optimise supply chain operations using techniques such as supply chain finance (Jüttner et al., 2003; Xu et al., 2003; Manuj and Mentzer, 2008; Creazza et al., 2010). Adoption of supply chain finance practises has been linked to benefits such as cheaper procurement unit costs, fewer supply interruptions, longer payment periods, and greater

business continuity (Evans and Koch, 2007; Sadlovska, 2007). The study's positive association backs up the claim that efficient supply chain finance may improve a company's overall performance.

4.6.2 Supply Chain Integration and Firm Performance

Using a basic linear regression analysis, this research also explored the impact of supply chain integration on business performance. The R-squared value of 0.196 indicates that supply chain integration accounts for about 19.6% of the variation in business performance. With a significance level of 0.000 (less than 0.05), the analysis of variance confirms the model's usefulness. This result shows that the model correctly forecasts the influence of supply chain integration on company performance. The regression findings show that these two variables have a significant and positive association. Notably, a one-unit increase in supply chain integration leads to a 44.3% improvement in company performance. The conclusion reached is that supply chain integration is critical in enhancing business performance. The study's finding that supply chain integration has a positive and significant impact on business performance is consistent with previous research. Because of the complexity of today's supply networks, there is a greater focus on stakeholder coordination and cooperation to optimise supply chain operations (Mentzer et al., 2001). Prior research has emphasised the need of aligning material, information, and financial flows within industrial organisations in order to improve performance (Hofmann, 2005; Pfohl and Gomm, 2009; Bryant and Camerinelli, 2014; Liebl et al., 2016). The study's findings support the notion that successful supply chain integration may favourably impact a firm's overall performance.

4.6.3 Mediating Effect of Supply Chain Integration

The research also investigates the direct and indirect effects of supply chain integration on the connection between supply chain finance strategy and organisational performance. The findings show that the mediation effect of supply chain integration has a positive and significant association with business performance. The zero between the lower-level and upper-level limit confidence intervals (LLCI and ULCI) indicates that both the direct and indirect channels are significant. These zero ranges show complete mediation, meaning that the influence of supply chain finance strategy on organisational performance exists exclusively when supply chain integration is not existent. When there is supply chain integration, the direct impact becomes small but the indirect influence stays significant. Prior research has demonstrated that supply chain integration improves stakeholder coordination and cooperation (Hofmann, 2005; Pfohl and Gomm, 2009; Bryant and Camerinelli, 2014; Liebl et al., 2016). According to the study's complete mediation result, the positive influence of supply chain financing strategy on firm performance becomes significant only when supply chain integration is missing, emphasising the need of an integrated approach for realising the advantages of financing strategies.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This section discusses and analyses the results of this study and presents the summary results of the study. It includes the findings related to the objectives of the study, such as the findings of the experiences in the previous chapter.

5.1 Summary of Study

The study focuses on assessing the impact of supply chain financing on organizational performance, considering the role of supply chain integration. Objectives encompass understanding financing strategies, exploring the link between integration and performance, analyzing financing's effect on performance, and evaluating integration's potential mediation. Employing a descriptive-explanatory approach, a survey captured insights from top management, bankers, and suppliers in Ghanaian manufacturing firms. Sampling involved 200 SMEs and manufacturers through random and convenient methods. Questionnaires, supported by secondary sources, were analyzed using SPSS and Excel, with findings presented visually and quantitatively, offering comprehensive insights into the subject.

Also, the study analyzed socio-demographic and firm-level attributes. Demographically, 60% were males, 40% females, mostly aged 31-35 (37%), in middle management (46.5%), and varied industries, with banking (16%) and manufacturing (27%) prominent. Firm characteristics included tenure and size distribution, e.g., 37% existed for 21-30 years, and 22% had over 301 employees. Constructs evaluated using Likert scale included supply chain finance (mean 3.49), organizational performance (mean 3.75), effect of supply chain finance (mean 3.025), factors influencing supply chain finance (mean 3.15), and supply chain integration

(mean 3.525). Reliability tests demonstrated strong internal consistency ($\alpha > 0.8$), while Pearson correlations exhibited positive significant relationships between constructs, with no multicollinearity detected.

Also, the key findings are;

- i. Supply chain financing strategy had a positive and significant relationship with firm performance.
- ii. Supply chain integration also had a positive and significant influence on firm performance.
- iii. Supply chain integration fully mediated the nexus between supply chain financing strategy and firm performance.

5.2 Practical Implication

The practical implications are suggested in the following;

5.2.1 Supply Chain Financing Strategy and Firm Performance

The outcome demonstrated a positive relationship between supply chain financing strategy and firm performance carries substantial practical implications for businesses. The finding that an increase in supply chain financing strategy leads to a 40.3% boost in firm performance underscores the significance of adopting effective financing practices within the supply chain. Organizations can leverage this insight to strategically allocate resources to their supply chain financing initiatives, thereby enhancing their overall performance. Moreover, the significant relationship between the two variables suggests that companies should consider incorporating supply chain financing strategies into their business models to attain sustainable growth and competitiveness. This analysis highlights the pivotal role of financial strategies in driving

positive business outcomes and encourages businesses to explore innovative ways of managing their supply chain finances to optimize performance.

5.2.2 Supply Chain Integration and Firm Performance

The study of the link between supply chain integration and firm performance provides firms with practical insights for improving operational efficiency and competitiveness. The significant and positive relationship between supply chain integration and firm performance highlights the need of building strong cooperation and coordination across the whole supply chain network. These insights may be used to prioritise investments in technology, procedures, and partnerships that enable the seamless integration of supply chain operations. As a result, they may improve overall performance by streamlining operations, reducing inefficiencies, and streamlining processes. The discovery that a unit improvement in supply chain integration leads to a significant 44.3% boost in firm performance highlights the potential advantages of strategic integration initiatives. This research emphasises the need of taking a comprehensive approach to supply chain management, where integration becomes a major pillar of operations, eventually leading to long-term development and success.

5.2.3 Mediating Role of Supply Chain Integration

The identification of the mediating effect of supply chain integration in the relationship between supply chain financing strategy and organizational performance carries practical implications that can shape strategic decision-making. The insight that supply chain integration mediates the impact of financing strategies on performance highlights the intricate interplay between these factors. Businesses aiming to optimize their performance should recognize that supply chain integration acts as a key mediator in this equation. This finding suggests that a dual focus on both financing strategies and integration efforts is crucial. When

supply chain integration is present, the analysis suggests that the direct effect of financing strategies becomes less pronounced. Thus, organizations should consider a holistic approach that incorporates financing practices alongside integration initiatives. Hence, they can harness the full potential of both aspects and achieve a synergistic effect on organizational performance. This analysis prompts businesses to adopt a nuanced approach to supply chain optimization, acknowledging the mediating role of integration in achieving sustained success.

5.3 Theoretical Implications

The following are the theoretical implication based on study objectives;

5.3.1 Supply Chain Financing Strategy And Firm Performance

The regression study demonstrating a positive link between supply chain financing strategy and firm performance has broad theoretical significance in supply chain and financial management theories. The discovery that supply chain financing strategy has a significant influence on firm performance emphasises the need of an integrated approach that takes into account both financial and operational components of the supply chain. This finding is consistent with theories that emphasise the interdependence of supply chain operations and their impact on organisational results. The empirical evidence showing a positive link also emphasises the significance of financial decision-making in influencing firm performance, bridging the gap between financial management and supply chain management theories. This study adds to the expanding theoretical landscape by showing the practical relevance of incorporating supply chain finance techniques into larger organisational plans for improved performance.

5.3.2 Supply Chain Integration And Firm Performance

The study of the link between supply chain integration and firm performance has significant theoretical implications for supply chain management and organisational theory. The positive and significant association between supply chain integration and firm performance supports theories that emphasise the significance of cross-organizational cooperation, coordination, and alignment. This empirical data supports the core of the relational view and transaction cost economics by demonstrating that integration promotes efficient exchanges of information, resources, and expertise throughout the supply chain network. The measured effect of supply chain integration on firm performance strengthens the theoretical framework of resource-based perspectives and dynamic capabilities, emphasising the strategic benefit that integration may provide. This study contributes to the theoretical debate by giving empirical evidence for conceptual frameworks that emphasise the critical role of supply chain integration in improving overall organisational performance.

5.3.3 Mediating Role Of Supply Chain Integration

The discovery of supply chain integration as a mediator between supply chain financing strategy and organisational performance provides useful insights that broaden theoretical views in supply chain management, finance, and mediation theories. Recognising supply chain integration as a mediator is consistent with mediation theories, which emphasise the significance of intermediate factors in understanding interactions between components. This empirical validation applies mediation theories to supply chain and financial management, highlighting the subtle ways in which integration moderates the link between finance techniques and performance results. Furthermore, the importance of supply chain integration supports a theory of supply chain finance based on integration, implying that financial

strategies may work differently depending on the degree of integration. This approach adds to theoretical frameworks by offering a dynamic layer of interaction that highlights the situational impacts of integration on the link between funding methods and organisational performance.

5.4 Conclusion

The effect of supply chain integration as a moderator in the link between supply chain finance and organisational performance was studied in this research. The study design was descriptive and explanatory, with a descriptive survey design used to collect data from a sample of 200 SMEs and manufacturing enterprises in Ghana. Identifying supply chain financing strategies, assessing the impact of supply chain integration on firm performance, evaluating the influence of supply chain financing strategies on firm performance, and scrutinising the mediating role of supply chain integration in the relationship between supply chain financing strategies and firm performance were the specific objectives of the study. The study investigated both socio-demographic and firm-level characteristics, encompassing variables like gender, age, position, organizational tenure, industry category, company existence, and the number of employees. The analysis revealed a male majority (60%) and a concentration of participants within the 31-35 age group (37%). Most respondents held middle manager or head of department positions (46.5%), indicating their experienced insights. On the firm level, organizations actively working for 6-10 years (33%) and 21-30 years (37%) constituted significant portions. Firms with 200-300 employees (21%) were prevalent, spanning industries including banking, manufacturing, and oil & gas. Descriptive analysis indicated moderate agreement with supply chain finance statements (mean = 3.490), organizational performance (mean = 3.750), and effect of supply chain finance (mean = 3.025), while supply chain integration (mean = 3.525) exhibited slightly higher agreement. Reliability tests demonstrated strong internal consistency for all constructs (Cronbach alpha ranging from 0.840 to 0.886), indicating reliable

measurement. Correlational analysis unveiled positive and significant relationships among the variables, reinforcing the interconnected nature of the constructs. Hypothesis testing revealed a positive correlation between supply chain financing strategy and firm performance, with the model demonstrating a significant impact ($R^2 = 0.162$). Similarly, supply chain integration exhibited a significant positive relationship with firm performance, accounting for 19.6% of its variability ($R^2 = 0.196$). These findings substantiate the influence of supply chain financing strategy and integration on firm performance, elucidating their significance in contemporary business operations.

5.5 Policymaking (Organizational Recommendation)

The following are some of the policies organizations can adopt and implement as strategies;

5.5.1 Supply Chain Financing Strategy and Firm Performance

The findings derived from the regression analysis that establishes a positive correlation between supply chain financing strategy and firm performance hold noteworthy implications for policymakers and regulatory bodies. The empirical evidence underscores the importance of crafting policies that facilitate favorable conditions for businesses to adopt effective supply chain financing strategies. Policymakers can consider initiatives that promote access to various financing options, incentivizing collaborations between financial institutions and supply chain stakeholders. This alignment between policies and industry practices can help foster a supportive environment for businesses to enhance their financial operations within the supply chain. Additionally, these findings can guide policy interventions aimed at bolstering the financial resilience of businesses, ultimately contributing to economic stability and growth. By recognizing the critical link between supply chain financing and firm performance,

policymakers can develop targeted strategies that promote financial innovation, reduce barriers to financing, and create a conducive ecosystem for sustainable business development.

5.5.2 Supply Chain Integration and Firm Performance

The exploration of the relationship between supply chain integration and firm performance presents valuable insights for policymakers tasked with fostering economic competitiveness and efficiency. The empirical confirmation of a significant positive relationship between these two variables underscores the importance of policies that encourage collaborative partnerships and integration among supply chain participants. Policymakers can advocate for initiatives that promote knowledge sharing, technology adoption, and streamlined communication channels within supply chains. This may involve creating platforms for information exchange, supporting the development of standardized protocols, and offering incentives for collaboration. Moreover, understanding that supply chain integration leads to a substantial increase in firm performance can guide policy interventions aimed at strengthening the nation's overall business landscape. By prioritizing policies that facilitate integration across industries, policymakers can enhance productivity, innovation, and market competitiveness, contributing to economic growth and sustainability.

5.5.3 Mediating Role of Supply Chain Integration

The recognition of the mediating effect of supply chain integration in the relationship between supply chain financing strategy and organizational performance offers valuable insights for policy makers seeking to promote holistic approaches to business development. Policy interventions can be designed to encourage businesses to adopt integrated strategies that align both financial and operational aspects of supply chain management. Recognizing the significance of this mediating role, policymakers can promote programs that educate

businesses about the benefits of supply chain integration, providing resources and incentives to facilitate its adoption. Moreover, this understanding can guide policymakers in crafting regulations that promote transparency and cooperation within supply chains, further enabling the mediation effect to take place. By acknowledging and addressing the interplay between integration, financing, and performance, policymakers can contribute to the creation of a more resilient, efficient, and sustainable business environment.

5.5.4 Suggestions for Future Research

Future research could delve into the nuanced impacts of specific supply chain financing strategies on diverse industries, exploring contextual factors that influence their effectiveness. Investigating the moderating role of technology and sustainability in supply chain integration's effects on performance could offer deeper insights. Additionally, longitudinal studies could uncover evolving trends and long-term effects.

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APPENDIX 1

SURVEY QUESTIONNAIRE

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (KNUST)

ASSESSING THE IMPACT OF SUPPLY CHAIN FINANCE ON ORGANIZATIONAL PERFORMANCE: THE MEDIATING ROLE OF SUPPLY CHAIN INTEGRATION

Dear Respondent,

Questionnaire

These set of questions are intended for the research work on Supply Chain Finance among Manufacturing Companies in Ghana. The aim of the study is to assess the impact of Supply Chain Finance on organizational performance and the mediating role of supply chain integration. The work is submitted to the Department of Supply Chain and Information Systems, Kwame Nkrumah University of Science and Technology (KNUST), in partial fulfilment of the requirements for the award of the degree of Master of Science, Logistics and Supply Chain Management.

It would be most grateful if you could take a few minutes to complete this questionnaire by placing a tick in the appropriate box (☑). If possible, please try to answer all the questions.

Information is required solely for academic purposes and strict confidentiality is assured.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

Q1. Please indicate your gender.

₁ Male ₂ Female

Q2. Please indicate your age.

₁ 20-25 ₂ 26-30 ₃ 31-35 ₄ 36-40 ₅ 41 and above

Q3. Please indicate the category of your industry.

₁ Banking and Finance ₂ Manufacturing

₃ Food and Agriculture ₄ Oil and Gas

5 Media and Broadcasting *6 Transportation and Logistics*

Q4. Please indicate your job role.

1 Senior Manager/Director *2 Middle Manager/Head of Department*

3 Junior Manager *4 Technical Assistant*

Q5. How long has your company been in the industry?

1 Less than 10 years *2 11-20years* *3 21-30 years* *4 31-40 years* *5 more than 40 years*

Q6. How long have you been actively working in the industry?

1 Less than 5 years *2 6-10 years* *3 11-15 years* *4 16-20years* *5 more than 20 years*

Q7. Please indicate the number of employees that work in your organization.
(Permanent/Casual)

1 Less than 100 *2 100-199* *3 200-300* *4 301-400* *5 401-500*

6 more than 500

SECTION B: IMPROVEMENT OF SUPPLY CHAIN FINANCE IN ORGANIZATIONAL PERFORMANCE

This section identifies how supply chain finance can improve organizational performance.

Q8. Benefits of supply chain finance in improving the performance of organizations in Ghana. Please indicate your answer by ticking the appropriate box in the table below (☑).

5= Very high 4=High 3=Agree 2= Disagree 1= Strongly disagree

No.	BENEFITS OF SUPPLY CHAIN FINANCE	5	4	3	2	1
1.	The cost of processing payments to suppliers decreases as it is now performed by the financial institution.					
2.	The cost of goods sold may drop due to lower negotiated input prices.					

3.	Ability to discount purchase orders, invoices, or accounts receivable early and with ease.					
4.	Ability to obtain more cash at a cheaper rate than through the use of discounts or a bank line of credit.					
5.	Financing costs decrease.					
6.	Helps establish a more collaborative relationship.					
7.	Enhances the stability and competitiveness of the Global Value Chain (GVC).					
8.	Better cash flow forecasting.					

Source: Lamoureux and Evans, 2010

Q9. What impact can the benefits of supply chain finance have on the performance of organizations in Ghana? Please indicate your answer by ticking the appropriate box in the table below (☑).

5= Very high 4=High 3=Agree 2= Disagree 1= Strongly disagree

No.	IMPACT ON ORGANISATIONAL PERFORMANCE	5	4	3	2	1
1.	Effective and Efficient in Supply Chain Operations.					
2.	Improvement in working capital.					
3.	Reduce processing and administrative cost.					
4.	Meet Lead time Periods					
5.	Improved supplier relations with organizations.					
6.	Improves Supply chain finance as a negotiation tool and increased knowledge about suppliers.					
7.	Mitigates risk.					
8.	Meets Production targets					

SECTION C: WHAT IS THE EFFECT OF SUPPLY CHAIN FINANCE PRACTICES ON ORGANIZATIONS IN GHANA?

Q10. The following effects to the use of Supplier Chain Finance practices have been identified. Please indicate your level of agreement by ticking the appropriate box in the table below (☑).

4= Strongly Agree 3= Agree 2= Disagree 1= Strongly disagree

No.	EFFECTS OF SUPPLY CHAIN FINANCE	4	3	2	1
1.	Increase in cost of goods sold.				
2.	Decrease in cost of goods sold.				
3.	Increase sales.				
4.	Improve profitability relative to total assets in generating earnings.				
5.	Achieve positive return on investments.				
6.	Increase in organizational cash flow.				
7.	Increase in inventory turnover.				
8.	Improves overall supply chain operations				

Source: Researcher Construct

SECTION D: WHAT ARE THE FACTORS INFLUENCING SUPPLY CHAIN FINANCE OF ORGANIZATIONS IN GHANA?

Q11. The following factors have been identified as necessary for influencing the implementation of Supply Chain Finance. Please indicate your level of agreement by ticking the appropriate box in the table below (☑).

4= Strongly Agree 3= Agree 2= Disagree 1= Strongly disagree

No.	FACTORS INFLUENCING SUPPLY CHAIN FINANCE	4	3	2	1
1.	The adoption of supply chain financing is geared towards improving the operational efficiency of both sellers and buyers.				
2.	Information sharing in the supply chain enables accurate and faster business decision making.				
3.	Improves banks' willingness to issue payment terms extension and reduce costs among trading partners.				
4.	Encourages close collaborations between stakeholders (banks and suppliers) in enhancing the performance of supply chain operations.				
5.	Supply chain financing can only be adopted through seamless flow of both physical and non-physical assets among all firm stakeholders.				

6.	Improves information transparency by Banks and can facilitate the alignment of sound supply chain financing performance.				
7.	Enables the adoption of technology that is capable of aligning banks and suppliers operations to improve internal supply chain development.				
8.	Helps to utilize supplier information in updating supply trade information to improve overall supply chain finance.				

Source: Gerald (2016)

SECTION E: WHAT IS THE MEDIATING ROLE OF SUPPLY CHAIN INTEGRATION ON ORGANIZATIONAL PERFORMANCE

Q12. The following factors have been identified as the mediating role of supply chain integration on organizational performance. Please indicate your level of agreement by ticking the appropriate box in the table below (☑).

4= Strongly Agree 3= Agree 2= Disagree 1= Strongly disagree

No.	MEDIATING ROLE OF SUPPLY CHAIN INTEGRATION ON ORGANIZATIONAL PERFORMANCE	4	3	2	1
1.	Effective Communication				
2.	Promotes long-term relationship				
3.	Information technology				
4.	Strong Supplier base				
5.	Cross-functional teams				
6.	Supplier integration				
7.	External logistics integration				
8.	Supplier (Procurement) performance				

Source: Sohail et al; (2009)

End of Questionnaire..... Thank you for your assistance and response.