The Role of Supply Chain Finance on Supply Chain Management and Firm's Performance: A Conceptual Framework

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Abstract:

The literature on supply chain finance as a moderating element for enhancing business performance and the overall efficacy of supply chain management is reviewed in-depth in this study. It analyzes the critical factors, benefits, challenges, and opportunities associated with supply chain finance implementation and its impact on various performance indicators, including operational efficiency, cost reduction, and risk management. Additionally, it emphasizes the strategic implications of implementing supply chain finance practices for businesses seeking a competitive advantage in today's swiftly changing business environment. By consolidating the present body of research, this study improves the link between supply chain finance and supply chain management and its effect on company performance.

Keywords: Supply Chain Management, Supply Chain Finance, Moderating, Firm's Performance.

1. Introduction

In today's global and competitive business environment, effective supply chain management (SCM) is essential for a company's survival [1], [2]. SCM refers to the process of organizing and regulating the passage of products and services from the point of origin of primary materials to the final consumer [3]. Supply chain finance (SCF), refining financial operations and efficiently managing working capital within the supply chain, is a fundamental component of supply chain management [4].

In recent years, practitioners and academics have paid close attention to SCF's capacity to improve a company's financial performance, reduce business risks, and strengthen supply chain resilience [5]. Despite SCF's growing importance, its moderating role in improving a company's financial results still needs to be better understood [6].

Academics can now identify and validate foundational supply chain management models and structures through analytical and
observational techniques [7]. Numerous studies have examined the impact of various SCM techniques on organizational performance [8]. As the field of SCM studies evolves, numerous researchers are examining the applicability of their findings to other industries. What happens when organizations at various locations in the supply chain implement distinct "best practices" [9]?

This analysis is motivated by the following research question: "How does supply chain finance act as a moderator to improve a company's business performance?" The research seeks to answer this question by investigating:

- Evaluate the current research on SCF and its impact on business outcomes.
- Determine how SCF functions as a moderator in supply chain management.
- To direct researchers and practitioners toward promising new research avenues in SCF and SCM.

In this meta-analysis, we investigate research from 2015 to 2023 that examines the moderating effect of SCF on a firm's performance. In the research, leading academic journals publishing articles on supply chain management, finance, and operations management are evaluated. It summarizes the current state of knowledge, identifies knowledge deficits, and proposes future research options for academics and professionals in the field.

2. Literature Review

2.1. Supply Chain Management:

Supply Chain Management includes organizational units at different points along the supply chain and coordinates the flow of materials, information, and money to meet (ultimate) consumer needs [2], [10]. The supply chain, administered by supply chain management, involves coordinating and administering goods, services, information, and money as they travel from suppliers to consumers [11], [12]. It coordinates how products and services move from their place of origin to where they are used. This includes but is not limited to, suppliers, manufacturers, distributors, retailers, and consumers. SCM coordinates all internal and external processes and procedures of an organization [13].

SCM can increase the productivity of manufacturing companies, the customer satisfaction of service providers, and the profitability of retail stores [14]. The Integrated Tertiary Educational Supply Chain Management (ITESCM) model for the service sector looks at tertiary educational institutions' inputs, outputs, and processing. SCM includes the whole process of making things, from getting the raw materials to delivering the finished goods to customers [10].

In the early 20th century, vertical integration was the standard SCM method. Firms owned and managed the entire supply chain, from raw materials to finished products. Because the firm did not change to meet the market's changing needs, its profits started to go down. In contrast, modern supply chains prioritize collaboration, specialization, and adaptability.

Businesses outsource non-essential tasks or form strategic alliances with other groups to focus on what they do best. The term "virtual integration" shows how this business strategy can help companies adjust to changing market conditions, new technologies, and
different customer tastes. The new supply chain model encourages innovation, productivity, and competition by using what each organization does best [15].

In supply chain management, many people work together to ensure everything goes smoothly, from production to sales (Figure:1, [15]. Suppliers guarantee quality, timely delivery, and competitive pricing of the raw materials, parts, or finished goods they send [15]. Workers transform these raw materials during manufacturing into finished goods, focusing on efficiency, quality, and price. Logistics companies and distributors monitor the movement and storage of goods before shipping them to customers. Retailers serve as the final step in the purchasing process, offering excellent customer service and employing efficient distribution routes to make it easy for customers to acquire their desired products. As partners in the supply chain, especially the final customers, become more critical, business strategies shift to emphasize cross-company coordination of functional activities [16].

In modern businesses, supply chain management plays a critical role by ensuring the seamless movement of products and services from their originators to their final consumers [15]. Boosting productivity, cutting costs, enhancing customer relationships, and doubling profits are possible outcomes of successful SCM. For long-term success, businesses need to put SCM factors like information system integration, principles of sustainability, and supply chain optimization (SCO) at the top of their list. This study examines some of the most common supply chain strategies suggested in the SCM literature. Various SCM approaches can help a company improve its performance. The primary goal is to explore a representative sample of prevalent supply chain tactics rather than an exhaustive list of all possible strategies.

2.1.1. Supply Chain Agility (SCA)

In the supply chain context, agility means how quickly a company can adapt to changing conditions [17]. The researcher [18] defines "quick response" as coordinating and sharing data across the production, distribution, and retail sectors in the readymade garments (RMG) industry to better meet consumer demands. SCA strategy affects profitability through factors such as the number of items purchased, discount percentages, after-sale support needed, shipping costs, product variety and quantity, urgency, purchasing process, and outstanding debt duration [19]. Another researcher [20] highlighted the importance of an agile supply chain strategy for a company's success in their article. They suggested that the developed approach could address various supply chain challenges.

2.1.2. Supply Chain Effectiveness (SCE)

There is a correlation between effectiveness and efficiency when measuring performance [21], making it essential to define these concepts. Supply chain effectiveness can be
described as an external benchmark for evaluating how well an organization addresses the needs of various groups and organizations involved in its activities. In contrast, effectiveness is more focused on external results.

SCE represents the extent to which a supply chain meets customer requirements while simultaneously achieving desired outcomes such as cost efficiency, adaptability, and responsiveness [22]. Assessing SCE is critical in the context of Supply Chain Management (SCM) and the increasing demand for quality, timely delivery, and addressing other significant challenges in competitive markets.

Performance measurement, as per an older definition, aims to identify and quantify performance indicators or metrics [23]. In other words, it attempts to show the extent to which supply chain objectives, such as quality, time, and cost, are achieved [23]. Consequently, performance measurement is a valuable approach as it allows for evaluating the success of supply chain components from various perspectives.

2.1.3. Supply Chain Sustainability (SCS)

According to the SCS definition, businesses must also consider the long-term welfare of the communities and ecosystems they influence [24]. Concerning SCM, the concept of "sustainability" has also garnered considerable scholarly interest. With the convergence of "green" principles and SCM, the first steps toward integrating sustainability into SCM were taken. [25]. Historically, businesses have only considered profit as a measure of success. [26]. However, the general public is beginning to recognize that corporations have social and environmental responsibilities. Consequently, sustainability in the SC encompasses a variety of concepts, such as the "green SC," in which companies actively seek to reduce the detrimental impact their SC has on the adjacent environment [27]. Environmental sustainability has ascended to the top of government and business agendas due to pervasive criticism directed at industrial businesses for being the primary perpetrators of environmental and ecological devastation [28].

2.2. Firm's Performance:

Work performance refers to the quality of output produced within a specific time frame and according to predetermined standards. The researcher [29] describes the supply chain as a "network" of companies with upstream and downstream vertical connections, integrating physical operations within a company. A business's success reflects its market commitment and pursuit of profit.

Effective supply chain management can significantly impact a business's bottom line and overall profitability, as they are closely connected [30]. SCM tries to improve the production, distribution, and use of goods and services by coordinating the actions of everyone in the supply chain [31]. Financial and operational measurement methods can assess supply chain management's impact on a firm's performance [23]. Financial analysis tools calculate metrics like profit, sales, and return on investment. In contrast, operational measurement tools evaluate production
metrics such as throughput, lead times, and product quality [32].

2.2.1. Operational performance

Operational success refers to how well, efficiently, and well-made an organization's techniques are at making its goods or services. SCM can reduce manufacturing waste, delays, and lead times. Better inventory management could help a company avoid stockouts and having too much inventory if suppliers and manufacturers worked together more closely [33]. In turn, this results in superior final products and pleased customers.

2.2.2. Financial performance

Optimizing the supply chain can increase profit margins and operational efficiency [34]. Having less inventory on hand reduces holding costs, and shortened lead times may result in faster order fulfillment, both of which boost sales and income [35]. An efficient supply network enhances a company's adaptability to fluctuating market conditions.

We must emphasize the significance of supply chain management to a firm's success. Better supply chain management may improve a firm's operational and financial results, leading to greater efficiency, lower costs, and a longer-lasting competitive advantage. To get the most out of supply chain management and its ability to improve business performance, it is crucial to work with suppliers and other stakeholders [35].

2.3. Relationship between SCM and Firm’s Performance

The supply chain of a firm is a big part of how it competes in the places it does business. The company bases its entire business strategy on consumer needs, so it must adapt to market conditions. Three steps are necessary to align the supply chain with the business strategy. Upon understanding the markets a business serves, its primary strengths, and its responsibilities, an individual can acquire the necessary supply chain skills [15], [36].

Integrating supply and demand management is the ultimate goal of supply chain management, which involves strategic planning of each organization's position throughout the supply chain operations. Establishing an effective SCM system for a business result in increased output, decreased expenses, quicker processing and delivery, increased profits, and increased customer loyalty [33]. According to the academics mentioned above [36], [37], SCM is the practice of coordinating the efficient and cost-effective delivery of products and services to end consumers. Suppliers become integrated into internal company processes as part of the goal of SCM to create value for consumers [17].

SCM has a significant impact on how well a business runs and makes money. An effective SCM strategy can improve operational and financial results by improving things like efficiency [38], responsiveness, flexibility, cost savings, revenue growth, and resource allocation [39].

SCM can make operations easier, cut down on lead times, improve efficiency, make better use of resources, and lower costs [38]. It also improves the product's quality by ensuring the correct parts are used, the best ways to make them are used, and the highest standards are kept at every step of the supply chain [39]. A well-run supply network helps
a company respond to changes in demand and prices [40]. Additionally, reducing lead times may increase customer satisfaction [41]. Conversely, effective SCM can result in fewer losses, increased profits, more efficient use of working capital, and reduced risks.

Companies can reduce costs, minimize waste, lower purchasing expenses, and optimize inventory levels [25]. Improvements in product quality, turnaround times, and adaptability can lead to increased revenues [1]. Optimizing working capital can help businesses enhance their working capital by reducing inventory and streamlining payment and receipt processes. Identifying, evaluating, and mitigating supply chain risks through risk mitigation can benefit businesses [30], [42].

*Supply chain management has a relationship with the firm’s performance.*

### 2.4. Overview of supply chain finance (SCF)

Supply chain finance is a collection of financial products and services that enhance the supply chain's capacity to manage working capital and revenue flow for the firm. [43], [44]. SCF aims to reduce supply chain financial risks and costs by increasing collaboration, transparency, and efficiency among suppliers, buyers, and financial institutions [45]. Reverse factoring, inventory financing, and dynamic discounting are three popular SCF processes [46]. Two main perspectives on SCF exist the "finance-oriented" view, which prioritizes short-term solutions provided by financial institutions and addresses accounts payable and receivable, and the "supply chain-oriented" view, which may or may not involve a financial institution and prioritizes working capital optimization concerning accounts payable, receivable, inventories, and sometimes even fixed asset financing [47].

The evolution of SCF concepts and practices began in the early 2000s when firms started exploring innovative ways to optimize their supply chain operations and improve their financial performance [48].

Over time, the number of ways SCF can be used has grown. This is because technology has improved, FinTech solutions have become more popular, and the need for sustainable supply chain practices has grown [6]. Also, recent disruptions to the global economy, like the COVID-19 pandemic, have shown how important SCF is for reducing financial risks and making supply chains more resilient [49].

### 2.5. Relationship between SCF and Firm’s Performance

Numerous empirical studies have shown a positive relationship between SCF and firm performance, including improved financial performance [45], reduced costs and lead times [44], and increased operational efficiency [24]. Additionally, researchers have found that SCF enhances supply chain resilience by mitigating financial risks and ensuring operations continuity during disruptions.

The relationship between SCF and a company's financial and operational performance interests' academics and practitioners. SCF provides financial solutions to businesses and their supply chain partners, allowing them to optimize working capital, reduce costs, and enhance cash flow. This can significantly impact a company's
performance. Researchers [45], [50] argue that SCF can lead to improved cash flow management, reduced financing costs, and increased profitability by extending payment terms and providing access to working capital at lower costs, thus decreasing working capital needs and increasing profitability. Meanwhile, SCF can improve operational performance by enhancing supplier relationships, reducing supply chain disruptions, and improving inventory management, lead times, and customer responsiveness [51], [52]. The researcher used financial supply chain management (FSCM) to explain the relationship between SCF and SCM Figure: 2, [53].

![Figure 2. Financial Supply Chain Management (FSCM), Source: [53]](image)

Supply chain finance has a relationship with the firm’s performance.

2.6. Theoretical perspectives on SCF as a moderator in a firm’s performance

Diverse theoretical perspectives, such as the resource-based view (RBV), transaction cost economics (TCE), strategic choice theory (SCT), and the balanced scorecard (BSC), contribute to the supply chain finance (SCF) literature. According to the researcher [54], managing SCF resources effectively within the RBV framework can lead to competitive advantage and improved business performance. Another group of researchers [2] argue that, based on TCE and SCT, SCF can lower transaction costs and uncertainty in supply chain relationships, enhancing overall performance. On the other hand, the Balanced Scorecard (BSC) serves as a widely adopted strategic management framework, allowing organizations to convert their business objectives into operational objectives for evaluating and monitoring performance from multiple perspectives.

2.7. Critical factors influencing the effectiveness of SCF.

Several critical factors have been identified in the literature that influence the effectiveness of SCF, such as information sharing, trust, risk management, and financial infrastructure [55]. Furthermore, the researcher argued that organizational factors, including firm size, financial stability, and supply chain complexity, can also impact the success of SCF implementation.

The benefits of implementing SCF include improved working capital management, reduced financial risks, increased supply chain transparency, and enhanced supplier-buyer relationships [46], [47]. However, there are challenges in implementing SCF, such as the need for more standardization, complex legal and regulatory environments, resistance to change, and significant investments in technology and human resources [52].

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supply chain resilience by mitigating financial risks and ensuring the continuity of operations during disruptions.

2.8. SCF moderate the relationship between SCM and Firm's Performance

Supply chain, supply chain management, and supply chain finance derive from managing the flow of products and services within an organizational context. However, they are distinct components of the supply chain ecosystem as a whole [1], [15].

Supply chain finance can be considered a specialized branch of finance that focuses on providing financial solutions and optimizing working capital for companies involved in the supply chain [57]. While it is not a traditional branch of finance like corporate finance or investment banking, SCF has become a prominent field of study and practice within the broader field of finance. SCF and SCM, on the other hand, are distinct ideas with a lot of similarities [47].

SCM refers to coordinating and managing all activities involved in procuring, producing, and delivering goods and services from suppliers to end customers [1], [36]. It consists of numerous departments and operations, including purchasing, manufacturing, supply control, shipment, receipt, and customer service. Supply chain management's main purpose is to optimize the entire supply chain process, emphasizing lowering costs, increasing efficiency, and increasing customer satisfaction [1].

SCF, on the other hand, is a set of financial solutions and practices designed to optimize the management of working capital and liquidity within the supply chain [53]. SCF facilitates better financial collaboration between buyers, suppliers, and financial institutions by providing short-term financing options such as reverse factoring, invoice discounting, and inventory financing [45]. The main goal of SCF is to improve cash flow, reduce financing costs, and mitigate financial risks throughout the supply.

While SCM and SCF have different objectives and scopes, they are interconnected because effective supply chain management can lead to better financial performance, and supply chain finance can improve operational performance [47]. By integrating SCM and SCF, companies can create a more resilient and efficient supply chain that benefits all stakeholders [57].

Supply chain finance moderates the relationship between supply chain management and firm's performance.

3. Methodology

We completed the conceptual structure through a multi-step process. In the first step, we looked for different SCM-related factors in the literature. Then, we filtered the data and found knowledge gaps in SCM, SCF, and the firm's performance. In the second stage, we conducted a comprehensive literature review of SCM, SCF, and the firm's performance studies. We found that certain effects were substantial while others were not
after comparing the differences between the findings of past research that looked at the relationships between these three parameters. We proposed a mental paradigm in the final phase to make sense of all these factors. In the final stage, we developed a suggested structure for effective SCM, SCF, and the firm's performance. As the authors of this philosophical article, we can only make educated guesses about causal relationships that require testing.

4. Conclusion

Supply chain finance can moderate the correlation between supply chain management and a firm's performance. SCF solutions improve cash flow and reduce financing costs, amplifying the positive effects of robust supply chain management strategies, such as efficient inventory management and flexible production planning. Despite the growing body of literature on SCF and its impact on company success, research gaps and inconsistencies still exist. Some studies focus on one or two isolated SCF processes without examining their interactions or relationship with supply chain management strategies. More empirical research is required to investigate the moderating effect of SCF across different SCM strategies and industry sectors. By gaining a deeper understanding of the impact of SCF mechanisms on firm performance and their moderating role in SCM, practitioners and policymakers can develop more effective strategies and policies to enhance supply chain efficiency and resilience. Actively promoting SCF solutions can lead to fewer supply chain disruptions and strengthen the overall industry.

References


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