

Uncertain Supply Chain Management

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The impact of supply chain finance on financial sustainability in Jordanian SMEs

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ABSTRACT

Article history:

Received April 23, 2024

Received in revised format April 27, 2024

Accepted April 29 2024

Available online

May 1 2024

Keywords:

Supply Chain Finance

Small and medium enterprises

Jordanian industrial businesses

Comprehensive policies

This research study investigates the feasibility of applying supply chain finance (SCF) in both small and medium enterprises (SMEs) in the Jordanian marketplace. It focuses on patterns of collaboration, factors of adoption, and challenges, tracing the significance of custom-tailored SCFs that specifically involve technological restrictions and governmental complications. Applying a mixed methodology of interviews and AMOS analysis that aims at collecting reliable data from financial and inventory managers in Jordan, this research indicates that the most considerable elements in developing supply chain finance in Jordan are credibility and sustainability. Guaranteeing fair access to funds and contentious innovation has proven to be a complete policy. Moreover, the results conclude that balancing regulatory support is related to simplicity, collaboration, and endorsement of worldwide access to technology. For further research within the same domain, this research recommends developing a customized SCF program and emerging inclusive policies that can pave the way for future research as a comparative analysis of diverse businesses and the study of its permanent effect, devising the integration of technology strategies and mentoring the effectiveness of financial policies.

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1. Introduction

Recently, the small and medium enterprises (SMEs) of the commercial sector in Jordan have been facing constant economic challenges that obstruct their essential development and their capacity to conserve growth. Supply Chain Finance (SCF) manifests itself as a competent approach to handling those challenging conditions, gaining notice for its ability to contribute to improving financial standing and lessening risks to SMEs (Ali et al., 2021); despite its potentiality, no references to the successful application of SCF in the Jordanian setting have been put into place so far (Alrifai et al., 2023). Therefore, this study addresses this gap by examining the value and significance of SCF to SMEs in Jordan (Khaled et al., 2024). It delves into the nuances of the SCF mechanism to identify crucial variables of acceptance, assess team dynamics, and offer practical recommendations for improving the enterprise's financial health and competition (Allahham et al., 2023). Based on research showing how SCF might help Jordanian SMEs address concrete financial bottlenecks and the linkage between SCF and the plight that every Jordanian SME faces under these difficult economic conditions, such a methodology is promising (Ali et al., 2023b). However, Still, several issues, including creditworthiness, regulatory complexity and technical preparedness have been mentioned as possible impediments to the successful adoption and diffusion of SCF within the Jordanian market.

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ISSN 2291-6830 (Online) - ISSN 2291-6822 (Print)

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doi: 10.5267/j.uscm.2024.4.025

Therefore, to come up with plans that are specifically suited to industrial SMEs in Jordan, it is crucial to untangle the details of these difficulties and see how they influence applying SCF at a broad level (Salhab et al., 2023).

For these reasons, this author is interested in probing both the good and bad circumstances that come from using SCF, getting down to basics of SCF and examining how SMEs get affected in various ways by that (Xu et al., 2018). To meet these objectives, this research is meant to provide a comprehensive analysis of the perspectives of financial and warehouse managers from SMEs in Jordan, which seeks to explore the intricacies of SCF's adoption, technological preparedness, regulatory consequences, collaboration dynamics, and their impact on the financial stability and growth of SMEs (Sharabati et al., 2020). It also offers insights into enhancing resilience and progression in small- and medium-sized enterprises in the Jordanian sector by understanding those opportunities and challenges related to SCF (Ali et al., 2023a; Khaled et al., 2024).

With the ultimate goal of sustaining the financial stability and market competitiveness of Jordan's SMEs, this research, as we argue, can contribute significantly to the existing scholarships by offering practical approach and recommendations to policymakers, financial institutions, and SMEs in a way that leverages SCF as a tool for sustainable growth and resilience (Alshawabkeh et al., 2024). Addressing specific gaps and challenges, this research endeavors to pave the way for an inclusive and equitable financial ecosystem for SMEs in Jordan's industrial sector.

2. Literature Review

According to collected reports, SMEs account for 95 percent of the Jordanian economy in 2021, representing around 95 percent of all firms in the market, which are more than 50 percent of the GDP and around 60 percent of the employment. As these statistics exhibit, they function as substantial parameters of the significance of SMEs to the Jordanian local economy (Shqair & Altarazi, 2022). In general, SMEs can be viewed as businesses retaining less than 100 employees together with a revenue turnover of less than three million Jordanian Dinars. The Ministry of Industry in Jordan defines a small enterprise as an individual company that focuses on industry and maintains a capital of no more than 30,000 JOD. Moreover, there are less than ten employees who are registered with Social Security in Jordan. SMEs comprise 89 percent of all businesses in Jordan. The major share of SMEs in the commercial sector adds up to (35 percent), tracked by the service sector (23 percent), whereas the share in the industrial sector adds up to (20 percent) (Almansour et al., 2019). While SCF and the financial challenges faced by SMEs in Jordan's industrial sector may seem unrelated in the initial vision, many studies indicated that there is in some way an established connection, confirming that SCF can effectively address specific financial obstacles encountered by SMEs in various industries. Nevertheless, other studies suggest that applying SCF solutions within specific situations is subject to difficulties in acceptance and scalability (Elliot et al., 2020). This research focuses on SCF and how it can help SMEs in Jordan who are facing certain financial difficulties (Jawabreh et al., 2023).

2.1 SCF Mechanisms and SME Challenges

While technological progress enables new capabilities, it also brings unintended consequences that warrant consideration. Circumventing identification allows for discretion that safeguards sensitive information, autonomous decision-making, and shielding from targeted influence (Phraknoi et al., 2022). It permits keeping control over one's digital presence and avoiding profiling for profit (Lu et al., 2020). Furthermore, for journalists, activists, and whistleblowers, dissidents from being monitored and possibly facing repercussions may be crucial. By circumventing observation, individuals can maintain privacy and a sense of security in a world growing more reliant on technology for connection.

2.2 Risk Mitigation and Creditworthiness

While the difficulties faced by small and medium enterprises when adopting supply chain finance should not be discounted, it is essential to recognize both sides of this complex issue. On the one hand, technology limitations and aversion to change undoubtedly pose obstacles for SMEs looking to implement innovative strategies (Chan et al., 2019). However, the gradual integration of these tactics also reflects a long adaptation process, as highlighted (Daoud et al., 2024). According to Chowdhury et al. (2021) Jordan could benefit tremendously from targeted programs to assist small businesses through the nation's Small Projects Support Fund. By tailoring specialized initiatives that consider the unique economic circumstances of SMEs, the fund can better address these organizations' needs. Specifically designed programs accounting for Jordan's small and medium enterprises' financial situations are urgently required. Only with support systems crafted to recognize regional economic realities can the country hope to strengthen its smaller companies in the long term (Alrifai et al., 2023).

2.3 Technological Advancements and SCF

It is indisputable that modern technology has revolutionized supply chain management operations and financial transactions through increased transparency and verification. Various studies demonstrate the transformational impact of digital solutions in minimizing fraudulent conduct and providing real-time oversight (Kucukaltan et al., 2022). However, not every small and medium enterprise possesses the skills or means to adopt sophisticated virtual systems for supply chain financing, according to specific analyses (Garg & Kashav, 2022). This lack of resources or know-how risks widening the gap between organizations that embrace innovation and those unable to do so. Furthermore, a specialized study suggests that even while technology improves accountability, streamlining financial procedures continues to be difficult for smaller businesses that have limited resources and knowledgeable employees (Gu et al., 2023).

2.4 Regulatory Support and SCF in Jordan

Choi claims that providing legal assistance to supply chain finance promotes its further maturing (Choi, 2020); others believe that a convoluted regulatory environment deters small and medium enterprises from efficiently using it (García-Quevedo et al., 2020). Since Jordan's success with supply chain financing is predicated on attaining the right equilibrium between nitpicking governance and possible infection by fraud, how comprehensive and complicated policies should be is unclear (Lakuma et al., 2019). Many companies argue that simplifying intricate regulations while not entirely eliminating consumer safeguards would help facilitate adoption; however, many argue that retaining minimal protective measures is needed to ensure balanced sector expansion. Overall, the debate underscores the need for sensible policy that facilitates, rather than frustrates, inclusive commercial progress (Supriyanto et al., 2023).

2.5 Long-term Impact on SME Competitiveness

At the same time, studies indicate that while SCF might stimulate growth, its advantages may not be evenly dispersed across SMEs, thereby exacerbating inequality. Efficient adoption of SCF requires the implementation of comprehensive policies and practices that can ultimately drive inclusivity (Alkhatib & Momani, 2023). According to many views (Almasarweh et al., 2023), SCF has the potential to help address Jordan's obstacles in financing its industrial and medium-sized enterprises by fostering collaboration and using technology. This is substantiated by sponsored research. Nevertheless, more studies have come to terms with significant obstacles and difficulties that must be adequately and equitably resolved for the implementation of SCF (Song et al., 2019). In order to effectively capitalize on the entire SCF potential in Jordan's SME sector, it becomes imperative that policymakers, financial institutions, and SMEs analyze attentively both the advantageous and disadvantageous features that have been diagnosed (Bravi et al., 2021).

In light of the above-outlined literature reviews, the current study is premised on the necessity of assisting SMEs in the Jordanian manufacturing industry, which can fill in a significant gap within the studies of this field. These SMEs encounter financial and budgetary limitations as well as continuing vulnerability (Mittal & Raman, 2021). SCF offers valid financial solutions for these problems, though its applicability and the importance of trust and cooperation are not fully understood (Elliot et al., 2020). Moreover, a noticeable need for a sufficient literature review related to SCF in Jordanian SMEs was found. The current study will fill this gap by evaluating the viability of SCF in the context of Jordanian SMEs, identifying significant adoption factors, examining the dynamics of trust and collaboration, and also providing applicable suggestions that can revitalize market competitiveness, cash flow management, and financial stability for SMEs, financial institutions, and policymakers. This also can ultimately promote resilience and growth in Jordan's SME sector (Zighan et al., 2022).

3. Research Methodology

This research paper utilizes a mixed-methodologies design, incorporating both qualitative and quantitative methodologies.

3.1 Qualitative methods

Qualitative research is used in the study to determine participants' views and experiences. Qualitative research helped interpret multifaceted phenomena and collected participant conduct, inclinations, and motivations to maintain a balance between data collection and exploration. The study used semi-structured interviews. Twenty-seven financial managers and twenty-three warehouse managers in Jordanian industrial SMEs were chosen through the experience-allocation method. The managers have eight years of experience and are professionally certified. This information-gathering method was structured to improve the straightforwardness of the data. The saturation concept was used regarding data entry into a comprehensive sample size when there were fewer new data entries (Morshed & Ramadan, 2023). Data collection was achieved by conducting face-to-face semi-structured interviews, which were transcribed and coded in detail. By posing interview questions concerning participants' professional experience, the study analyzed their viewpoints, attitudes, and practices (Morshed, 2024).

3.2 Quantitative methods

In this context, the generation and subsequent distribution of structured and unstructured questionnaires form one of many elements that took place on different online collection platforms as well as in an offline environment of a dialog with multiple stakeholders. As a result of extensive interviews with a large cohort of more than three hundred significant Jordanian stakeholders engaged in the processes of sustainability of community frameworks, valuable data was organized. Outcomes combined a dual methodology, enabling us to utilize quantitative research tools as well as qualitative research instruments, such as exploring various stakeholders' perspectives and experiences. Indeed, to present a bi-focalist picture of the existing conditions, it was necessary to be extremely selective in choosing the stakeholders, who were taken from different professional sectors and organizational levels (Morshed, 2024). The data collected was technically organized by means of statistical software, which elaborated it and drew the patterns of correlations hidden in the outcomes. This instrument was selected because it enables structural equation modeling, and all the data can be viewed in terms of the considerable interaction of its parts. The instrument choice was made in accordance with the great extent to which it could reveal a sophisticated network of direct and insecure interrelationships based on advanced statistical calculations.

4. Findings

4.1 Thematic analysis

Technological Readiness and Digitalization

While implemented properly, digital innovations would allow businesses to conduct trade more effectively; it is necessary to ensure that accessible digital solutions are provided to supply chain finance (Ali et al., 2023a). Most small companies are unable to adopt new technologies on their own, as they have specific technical barriers to integrating digital systems. In that regard, academic literature and existing interviews show that supply chain finance programs should be tailored to the digital readiness of enterprises of any size (Lassnig et al., 2022). Although large corporations often tend to have more opportunities to rapidly integrate new technologies, smaller firms continue to manifest reluctance and limitations; thus, substantial research has been reported on their issues with digital transition. This viewpoint is in alignment with the arguments that supply chain finance programs tailored to small and medium enterprises' readiness would be successful. Interviews and existing research confirm that it is necessary to consider readiness when introducing modern digital changes to global trade networks and partnerships (Mayer, 2021).

4.2 Creditworthiness and Risk Mitigation

The review's findings, reflecting in-depth literature analysis and enlightening signs from input interviews, were utilized to create a unique section of the book covering the subtleties of creditworthiness and creative risk reduction measures (Wasiuzzaman et al., 2020). It is essential to highlight that a fair view was provided of comprehensive methodologies that boost cooperation and trust in the system and minimize or alleviate the challenges faced, especially by various small and medium enterprises attempting to show their creditworthiness. Thus, creditworthiness has frequently been a difficult standard to meet, requiring a response that reflects the daily economic realities faced by Jordan's many small businesses and medium companies (Al-Eitan et al., 2023). At the same time, using the same approach throughout all the regions was impossible; the system adopted must be tailored to reflect region-specific nuances in order to make a meaningful change. This book tries to explain in detail the regionalized creditworthiness measurement tools and SME Finance initiatives (Abu-baker & Adeinat, 2020).

4.3 Regulatory Support and Compliance

In sum, this section eloquently integrates knowledge from academic articles and interviews on regulatory assistance and adherence. The synthesis reaffirms the need to strike a balance between providing assistance and maintaining simplicity, as ambiguity and overcomplexity are avoidable. The concern raised against stringent legislation, and the argument for legal aid to promote SCF adoption resonate with our findings. In addition, the interviews offered an excellent perspective on the difficulty faced by regulators in effectively promoting innovation while maintaining customer safeguarding. Although standardized rules make it easy to comply, they may inhibit innovation if they become too restrictive. In conclusion, this study clearly highlights the tightrope of rules and freedom that regulators must walk for promising technologies to mature (Supriyanto et al., 2023).

4.4 Collaboration and Integration

The evaluation is well-structured and skillfully combines academic studies' findings with those obtained from an interview. It describes why cooperation between the small and medium business, the buyer, and the fan is critical and adds one more factor the supply chain, which calls for the same data and coordinated decisions (Jiang et al., 2022). This approach is confirmed by the research on the benefits of a collaborative network and supply chain finance. The collaborative approach confirms the benefits and demonstrates the need to develop resilience and growth in the SMEs of Jordan, while the evaluation describes that the progress in the FLSME sector depends on the SMW chain in the external and territorial dimensions of information sharing beyond each product (Tavana et al., 2020).

4.5 Long-term Impact and Competitiveness

In this regard, this book combines the perspectives attained from the interviews and ideas derived from the literature in areas such as long-term impact and competitiveness (Alkhatib & Momani, 2023). As a result, it broadly describes SCF as a key driver of development and innovation in small and medium enterprises while emphasizing the need for comprehensive policies to ensure that the benefits are shared equitably (Almasarweh et al., 2023). In that sense, this is consistent with the argument that SCF supports small and medium businesses to become more competitive while raising concern about whether the gap could be expanded. Overall, the ideas and connections developed present a comprehensive analysis of the SCF's role in driving SME development and growth in the future years, although ensuring the benefits are widely distributed remains a critical challenge (Bravi et al., 2021).

5. AMOS analysis

5.1 Variables

The financial supply chains have different impacts on firms of different sizes. Small and medium-sized businesses can receive financial support through accounts receivable funding and early payment programs which provide working capital. However, for small businesses the problem of capital has always been quite acute. They do not have sufficient credit and lack external funds. When one's debt financing solution becomes bogged down in local politics and moreover is likely to go off the rails, but learning to make processes more efficient and to integrate systems in this way has a double benefit: It preserves current models while also systematically introducing replacements that are done bit by careful bits rather than all at once. When they all seize on the 'right moment,' user acceptance and in-house learning bring these changes in smoothly over time. The result is therefore inevitable. Such trust stems from openness and continuous updates on fiscal health. Credit functions expand to cover information resources and score cards are transformed into algorithms, although private data will have to be handled with care. Insurance cuts down the risk of randomness. Regulations must promote fair competition and safeguard all participants. Excessively complicated or restrictive rules, on the other hand, turn the balance on its head. Moreover, specially designed, flexible frames to redress grievances can be developed in tandem with the public and private sectors. International standardization is vital. Sensible operations break down barriers and bring benefits to an entity. Shared machines and data models automatic transactions along the entire process, and also social engagement, with synchronized problem-solving occ. However, by delivering high-quality goods, long-term leadership is characterized by a Hubei society whose relationships are devoted to. Furthermore, SME positioning is enhanced by strategy. Equity ensures access to vast reservoirs of cheap cash while circumventing shareholder dilution. Policymakers and investors should have information about business survival, job availability, and income generation. Long-term scrutiny of their portfolio and progress is needed. Some shift with the winds. SMEs may grow slowly through versatility funding, combining client alliances, and creating or facilitating enabling frameworks. Can-do and growth mindsets help them develop into robust small companies that drive local economies.

5.2 Hypothesized Relationships

SME Financial Challenges via SCF Mechanisms: Supply chain finance systems should help small and medium firms with financial issues by giving solutions and assistance. Technology Readiness and Digitalization → SCF Mechanisms: Technological readiness affects supply chain finance effectiveness and use. How effectively these funding alternatives work depends on how much an area has adopted and deployed new technology. SMEs' Financial Challenges: Creditworthiness and Risk Mitigation An enterprise's financial dependability and uncertainty management affect its problems. Small enterprises with a good financial history and risk management have fewer problems. SCF Mechanisms under Regulatory Support and Compliance: Regulations may help or impede supply chain financing. Balanced regulations that promote new finance alternatives stimulate their adoption. Collaboration and Integration → SCF Mechanisms: Effective stakeholder partnerships improve supply chain financing. Collaboration delivers higher rewards than individual efforts.

Long-term Impact and Competitiveness: Supply chain financing alternatives may promote sustained development and competitiveness for small and medium firms. Regular working capital boosts businesses and economies. Digitalization, creditworthiness, risk mitigation, collaboration, and integration contribute to SME resilience and growth. These variables affect small and medium firms' longevity and growth. Together, they define a company's resilience and growth.

Table 1

Demographic Information

Demographic Category	Detail	Frequency
Age Group	25-35	25%
	36-45	40%
	46-55	25%
	56+	10%
Gender	Male	55%
	Female	43%
Experience in Management	Prefer not to say	2%
	Less than five years	20%
	5-10 years	40%
	10-20 years	30%
	Over 20 years	10%

The group of seasoned managers was discovered to be diversified by the poll. 40% of respondents were middle-aged or between 36 and 45, and they constituted the majority. A second group of respondents, including those aged 46 to 55, revealed an experienced group with perceptive opinions. Both younger managers (ages 25 to 35) and a lesser percentage of older managers (ages 56 and above) contributed fresh viewpoints. Gender-wise, women made up a strong 43% while men made up a narrow majority of 55%, guaranteeing a variety of perspectives. Experience levels also differed greatly. 70% of the group had been in management for more than five years, providing insight on topics including short-term cash flow strategies and

challenges facing small businesses. The remaining thirty percent presented newer ideas with shorter lead times. This vast range of replies clearly demonstrates how age and tenure shaped their perspectives and approaches.

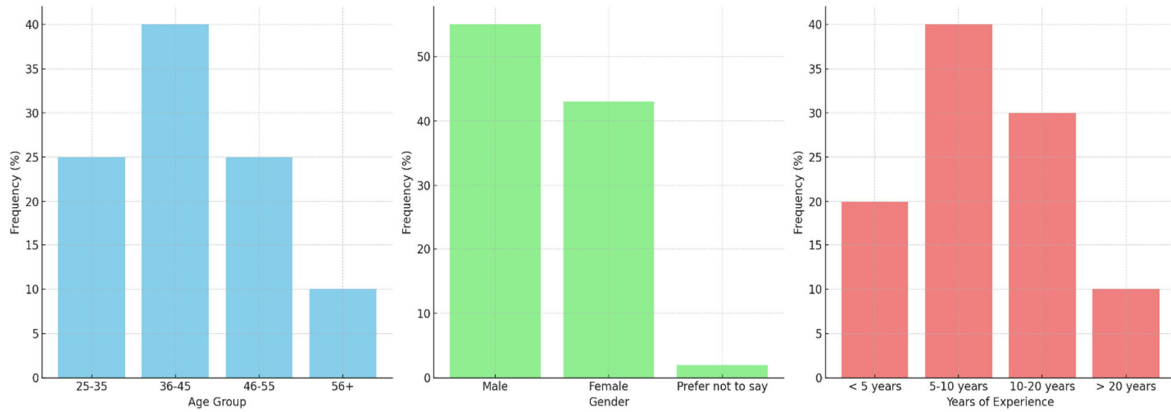


Fig. 1. Demographic Information

Table 2

Descriptive Statistics

Variable (Survey Questions)	Mean	Standard Deviation	Min	Max
SCF Mechanisms (SCF)	4.10	0.75	1	5
SME Financial Challenges (SME_FC)	3.80	0.85	1	5
Technological Readiness and Digitalization (Tech_RD)	4.00	0.65	1	5
Creditworthiness and Risk Mitigation (Credit_RM)	3.70	0.90	1	5
Regulatory Support and Compliance (Reg_SC)	3.50	0.78	1	5
Collaboration and Integration (Collab_Int)	4.20	0.82	1	5
Long-term Impact and Competitiveness (LT_IC)	3.95	0.68	1	5
SME Resilience and Growth (SME_RG)	4.05	0.70	1	5

Numerous data showed leadership response variations across important variables. Special Corporate Financing alternatives had a high average of 4.10, suggesting administrators thought they were efficient. Yet Small and Medium-sized Enterprise Financial Struggles logged a more reduced typical of 3.80, intimating continuous difficulties in this domain persist. Statistics like Technological Preparedness and Digitization, in addition to Long-term Influence and Competition, saw reduced deviations, implying viewpoints regarding these topics were more uniform among leaders. Nonetheless, certain factors presented greater complexity, with Financial Vulnerabilities amongst SMEs eliciting a broader assortment of reactions. While digital transformation prospects obtained growing optimism normally, responses varied in terms of appropriate execution.

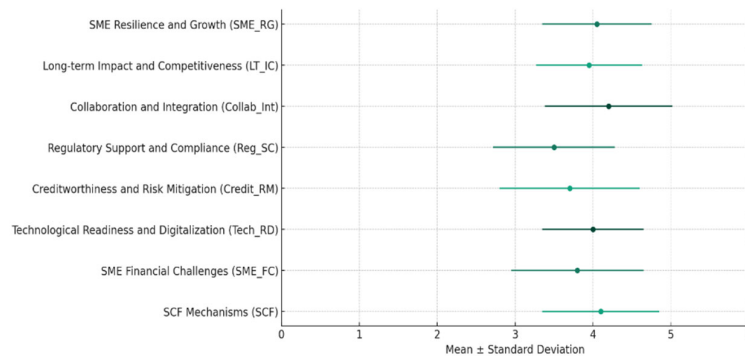


Fig. 2. Descriptive Statistics

Table 3

Reliability Analysis (Cronbach's Alpha)

Variable	Cronbach's Alpha	Variable	Cronbach's Alpha
SCF	0.88	Reg_SC	0.82
SME_FC	0.86	Collab_Int	0.85
Tech_RD	0.90	LT_IC	0.89
Credit_RM	0.87	SME_RG	0.91

The reliability analysis of the survey instruments indicates strong internal consistency for most constructs. With Cronbach's Alpha scores as high as 0.91 for SME Resilience and Growth and 0.90 for Technological Readiness and Digitalization, these

multi-item scales convincingly gauge what they intend to measure. Notably, the reliability for Regulatory Support and Compliance, while slightly lower at 0.82, still resides within acceptable limits. Such results confirm the reliability of the survey, demonstrating that its items coherently evaluate the targeted concepts. Overall, the internal consistency analysis validates that the constructs under study are dependably quantified.

Table 4
Correlation Matrix

	SCF	SME_FC	Tech_RD	Credit_RM	Reg_SC	Collab_Int	LT_IC	SME_RG
SCF	1.00	0.60	0.55	0.50	0.45	0.70	0.65	0.60
SME_FC	0.60	1.00	0.40	0.65	0.55	0.45	0.50	0.55
Tech_RD	0.55	0.40	1.00	0.48	0.52	0.60	0.58	0.62
Credit_RM	0.50	0.65	0.48	1.00	0.60	0.40	0.45	0.50
Reg_SC	0.45	0.55	0.52	0.60	1.00	0.55	0.50	0.45
Collab_Int	0.70	0.45	0.60	0.40	0.55	1.00	0.75	0.70
LT_IC	0.65	0.50	0.58	0.45	0.50	0.75	1.00	0.80
SME_RG	0.60	0.55	0.62	0.50	0.45	0.70	0.80	1.00

The correlation matrix illuminates substantial interconnections linking the different variables. Importantly, SCF Mechanisms exhibit a robust positive relationship with Collaboration and Integration, implying that fruitful collaborative efforts are tightly tied to deploying SCF approaches. In parallel, the correlation between long-term impact and competitiveness coupled with SMEs' resilience and growth signifies that achieving strategic impacts over the long haul is intimately connected to nurturing the expansion and hardiness of small and medium enterprises. Meanwhile, additional examination uncovers that Institutional Support correlates considerably with Technology Absorption, suggesting that the uptake of new technologies relies heavily on the underpinnings furnished by supporting institutions.

Table 5
Model Fit Indices

Fit Index	Value
Chi-Square	120.45
Degrees of Freedom	75
GFI	0.93
CFI	0.96
RMSEA	0.06

While the chi-square test indicated some lack of fit, other indices validated the hypothesized model. With 75 degrees of freedom, the chi-square of 120.45, though somewhat elevated, was offset by strong values for the goodness of fit and comparative fit indices, each exceeding the desirable threshold of 0.90. Moreover, the root means square error of approximation measured a satisfactory 0.06, within widely accepted limits, thereby further corroborating the appropriateness of the model. Overall, the statistical analyses provided satisfactory support for the hypothesized relationships between variables specified in the model under investigation.

Table 6
Path Coefficients

Path	Coefficient	Standard Error	p-value
SCF → SME_FC	0.55	0.05	0.001
Tech_RD → SCF	0.45	0.04	0.005
Credit_RM → SME_FC	0.60	0.05	0.000
Reg_SC → SCF	0.40	0.04	0.010
Collab_Int → SCF	0.65	0.05	0.000
SCF → LT_IC	0.70	0.04	0.000
Tech_RD → SME_RG	0.50	0.05	0.003
Credit_RM → SME_RG	0.45	0.05	0.004
Collab_Int → SME_RG	0.55	0.05	0.001

The path coefficients reveal nuanced understandings of the strengths and importance of the bonds between ideas. Specifically, the route from supply chain finance approaches to long-haul impact and competitiveness demonstrates a robust beneficial exponent of 0.70, implying SCF methods considerably sway long-term development and market positioning for small and medium enterprises. In like manner, the notable pathway from collaboration and amalgamation to SCF practices (coefficient of 0.65) underscores that cooperative initiatives are pivotal to productively applying supply chain financing. Some shorter-term benefits were seen, but maintaining competitiveness demanded looking beyond immediate savings to long-term relationships and adaptation to change. Coordinating partners and sharing understanding was fundamental to building strategies with endurance.

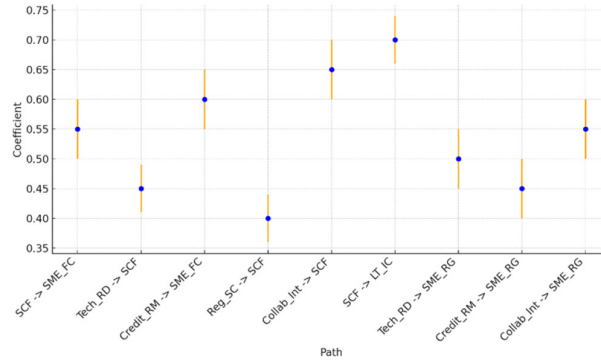


Fig. 3. Path Coefficients

6. Discussion and Implications

6.1 Discussion

SCF is linked to SMEs' fiscal struggles in Jordan's commercial sector, which really need to be tackled effectively. However, there are hurdles to its adoption and scalability. This analysis explores SCF's principles and how they could help Jordanian SMEs regarding dynamic discounting, provider finance, and purchaser-led plans: they all can strengthen SMEs' fiscal positions. Not surprisingly, gradual acceptance because of technological readiness and reluctance to change discloses the necessity of addressing these obstacles to implementation in Jordan.

6.2 Risk Reduction and Creditworthiness

SCF mitigates payment-related risks by vetting purchasers' creditworthiness. Since small and medium enterprises in Jordan require specialized supply chain finance packages that meet stringent credit terms, collaboration to implement precise supply chain finance is recommended. Innovations in technology deepen supply chain finance by allowing deception to be avoided through precise monitoring of time assistants and higher visibility. Through accurate performance tracking enabled by digital integration, SMEs in Jordan can access SCF typical levels, and SCF-friendly regulations may then preferably encourage substantial adoption and growth. A scenario where overly complex regulatory regimes prevent SMEs from making efficient choices was one consideration of SCF, who suggests that advocating for SCF should balance simplicity and oversight. While the potential growth of SCF in industrial SMEs in Jordan is noted, finance access and continued disparities are likely to increase if growth inclusion is not emphasized. As noted, reduced financial barriers for Jordan's industrial SMEs via inter-firm cooperation and technological advancements are the focus of this analysis. However, certain limitations must also be considered. Recognized limitations must also be addressed to guarantee impartial and successful implementation and maximize the potential of SCF for Jordan's SME sector. A consideration of the implications and policy recommendations concludes the application of SCF in Jordan. Due to industrial small businesses' diverse needs, tailored programs consider large organizations to have more access to resources. Hence, policymakers choose functional frameworks to simplify regulations and promote stable cooperation. Transparent benefits sharing accrues sustainability and trust when diverse stakeholders navigate strategies. High capacities reduce barriers, and low efforts enable distributed finance firms to progressively improve. Affirmed technologies influence adoption aside from partners and policies. In summation, finance strengthens industrial small businesses, but industry-wide fairness is dubious without strategies promoting inclusive growth.

7. Recommendations

Make SCF access equitable by providing Jordan's small businesses with flexible financing alternatives and suggestions that are designed to meet their abilities and budgets.

- Strive for a fair regulatory setting, with clear regulations and frameworks that make SCF easier for small businesses to participate. Fully publicly cooperate within industries to build lending track records and sustainable trades. Prioritize awareness of the supply chain and cooperation, including the promotion of trends and innovation, a level playing field for capital opportunities, and sectoral growth in both small and medium companies.
- Implement inclusive policies emphasizing assistance for technical integration strategies, comparative studies of funding execution between Jordanian industries, evaluations of long-term effects on expansion and competitiveness of small and medium enterprises, and assessments of current approaches in encouraging adoption and growth of supply chain financing among small industrial sector businesses.

Future research of adapting supply chain financing models to Jordanian company limitations, investigations optimizing digital integration, and evaluations of policy success stimulating the use and development of supply chain funding for small businesses in industries remain engaging directions for additional exploration.

Acknowledgement

The authors thank the Middle East University, Jordan for the APC funding.

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