

Factors affecting financial performance in supply chains in Africa: A systematic literature review

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ABSTRACT

This study employs a systematic literature review and content analysis to consolidate findings from studies that utilise partial least squares structural equation modelling (PLS-SEM) in exploring financial performance in supply chains in Africa. Based on data obtained from 9 Scopus-indexed journal articles published between 2020 and 2024, the study identified factors affecting financial performance in supply chains in Africa. The findings show that financial performance is negatively affected by internal green supply chain practices and green human resource management (HRM) practices. While, green supply chain management (SCM), supply chain environmental cooperation, green human capital, green logistics practices, supply chain collaboration, logistics and supply chain innovations, sustainable SCM, firm capabilities and green performance showed a significant positive direct impact. Mediators include green HRM, supply chain environmental cooperation, green SCM practices, green logistics practices, sustainable SCM, green radical product innovation, firm capabilities and green performance. Other factors such as ISO 14001 certification, firm size, age, and type act as control variables. Interestingly, the study revealed that only green HRM yielded contradictory findings towards financial performance. This review highlights key factors influencing financial performance in supply chains within Africa. It urges effective utilisation of the identified factors for enhancing financial performance. Also, the study calls for future research across African countries and establishing moderating variables using PLS-SEM.

Keywords: Africa, Financial Performance, PLS-SEM, Supply Chain Management, Systematic Literature Review

I. INTRODUCTION

Financial performance is the dimension of firm performance which entails the measurement of the financial position of an organisation over a given period. This performance dimension reveals how well a firm utilises the available resources to generate income (Coelho et al., 2023; Malik & Nadeem, 2014; Temba et al., 2024). Through financial performance, it becomes clearer on the extent to which firms or organisations achieve financial benefits. It is a fundamental tool for ensuring the survival and growth of businesses across different settings (Afin et al., 2024; Liu et al., 2022). Since, the desire to achieve financial health in businesses is crucial (Megeid, 2024; Mhlongo & Kunjal, 2025; Siswanti et al., 2024), financial performance becomes a relevant vehicle towards this desire. This is the reason for the recent growth on body of literature that highlights the increasing prominence of financial performance within supply chains as a research agenda (Eslami et al., 2024; Gangaraju et al., 2025; Huo et al., 2024; Wei et al., 2024).

Supply chain management (SCM), which covers aspects of planning, organising and controlling activities and processes across various domains in ensuring movement of products from original source to end consumers, has emerged as a cross-cutting field within multiple areas of research (Acquah et al., 2021; Asante-Darko & Osei, 2024; Changalima, 2025; Changalima & Kimario, 2025; Mchopa et al., 2024; Ndiango et al., 2025; Younesse et al., 2025). The growing interest in financial performance within SCM domains brings out the need to understand dynamics faced by firms involved in these supply chains. This expanding body of knowledge increasingly incorporates advanced analytical techniques, including second-generation multivariate models such as partial least squares structural equation modelling (PLS-SEM), to better capture and explain these complexities (Baah et al., 2022; Beka Be Nguema et al., 2022; Celikyay et al., 2023; Khanam & Ghosh, 2025).

Moreover, scholars focusing on African contexts are actively contributing to this domain (Acquah et al., 2021; Agyabeng-Mensah & Tang, 2021; Baah et al., 2022; Mahmoud et al., 2022). These are some of empirical studies that

have explored financial performance within supply chains in Africa, offering relevant insights into regional dynamics that are linked to the research domain. Particularly, these studies employed PLS-SEM is considered to be fundamental in analysing intricate models (Akter et al., 2017; Guenther et al., 2025; Hair et al., 2021; Magno et al., 2024; Sarstedt et al., 2022; Shmueli et al., 2019), that seek to explain various ways in which firms handle supply chain challenges to enhance financial outcomes. These contributions are critical for both academic understanding and practical application in developing economies like African countries. Yet, existing studies in this context are fragmented and, to date, there has been no comprehensive, systematic literature review (SLR) focused explicitly on synthesizing empirical studies that utilise PLS-SEM in relation to financial performance in supply chains within Africa. This represents a significant research gap, particularly given the importance of achieving financial performance for firms in African supply chains. Therefore, based on the empirical studies that have utilised PLS-SEM in this domain, the current review aims to satisfy the following research question (RQ):

What are the main factors affecting financial performance in supply chains in Africa?

A key contribution of this review lies in its ability to consolidate and synthesise PLS-SEM-based studies in the domain of financial performance in supply chains within Africa. The study centres on providing relevant insights regarding to the factors affecting financial performance based on the reviewed literature. This is relevant as financial performance can be explored through multiple conceptual lenses. The study employs a SLR approach and content analysis as the technique enhance comprehensive and depth of this review. Through this, the review identifies relevant variables have been researched in relation to financial performance in the research domain. This paper is more likely to bridge fragmented research strands, exposing geographical contexts, and offering a clear, evidence-based roadmap for future studies.

1.1 Research Objective

The main objective of this study is to identify the main factors affecting financial performance in supply chains within Africa. This objective is achieved by systematically reviewing empirical research articles that have utilized PLS-SEM.

II. METHODOLOGY

The study employed a PRISMA framework to obtain a corpus of literature to be included in the review (Page et al., 2021). This framework is relevant for studies that utilise literature review approaches. Accordingly, three stages were followed as recommended (see Figure 1). The study identified studies to be included in the review as retrieved from Scopus. Scopus was utilised due to its comprehensiveness of high-quality literature that are related to the research domain. Scopus that includes peer-reviewed literature, covering scientific journals across a wide range of disciplines (Baas et al., 2020; Changalima, 2025; Mushi et al., 2024; Rejeb et al., 2023, 2024). Since, the research domains related to financial performance and supply chains cut across several disciplines, Scopus was considered relevant to be utilised in this study.

Initially, the search was done on 14th June, 2025 which yielded a total of 82 publications that include the main three keywords (financial performance, supply chain, and PLS-SEM) in *article title, abstract, keywords*. These sections are considered relevant as they represent the key aspects of a publication. The search string included:

“financial performance” AND (“supply chain” OR “supply chain management” OR “SCM”) AND (“Partial Least Square* Structural Equation Model*” OR “Partial Least Squares SEM” OR “PLS” OR “PLS-SEM” OR “SEM-PLS” OR “PLS Structural Equation Model*” OR “Partial Least Squares Path Model*” OR “PLS Path Model*” OR “PLS-PM” OR “Structural Equation Model* PLS” OR “Variance-Based Structural Equation Model*” OR “VB-SEM” AND NOT (“covariance” or “co-variance”)).*

During the screening stage, the search was further limited to criteria such as document type and source type from which only *article* and *journal* were selected. This resulted to the exclusion of 15 publications. Also, 4 articles in press were excluded as the review included only journal articles that are classified as final in stage of publication. This resulted into 63 publications which were retained for further screening after removing a total of 19 publications. The search was limited to journal articles only as they are type of publications that have undergone a thorough peer-reviews which proves their quality in the research landscape. It should be noted that, 63 publications were all published in English. Therefore, there was no need for limiting the search to publications only published in English language as an international language for publications (Changalima & Mchopa, 2024; Rejeb et al., 2025).

Furthermore, during screening, 63 publications were retrieved and assessed for eligibility from which 54 were excluded as they were not conducted in any African countries. This was relevant as the current review considered only publications that were related to Africa, and hence, studies that were not centring on any African countries were excluded. This procedure was done by assessing the article title, abstract and full-texts. The procedure resulted into 9 publications that met the inclusion criteria and these publications were included for final analysis as presented in Figure

1. Content analysis was employed to identify the main variables that have impacts and act as factors affecting financial performance in supply chains within Africa.

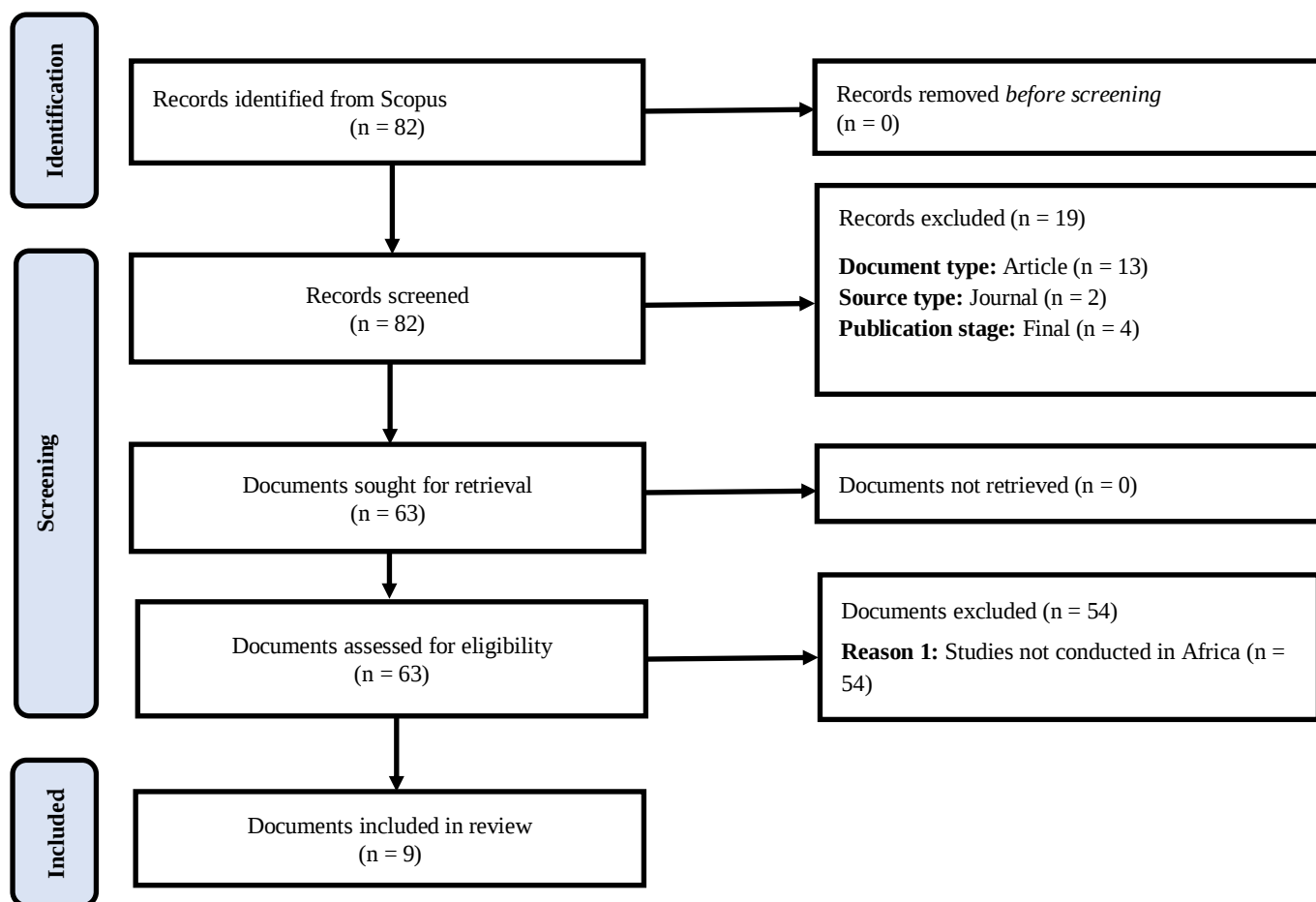


Figure 1

The PRISMA Flow Diagram

Source: Adapted from Page et al. (2021)

III. FINDINGS & DISCUSSION

3.1 Summary of the Retrieved Articles

This review included a total of 9 Scopus-indexed journal articles published between 2020 and 2024 in the realm of financial performance in supply chains within Africa. These articles utilised PLS-SEM as a quantitative approach in data analysis to test several hypothesised relationships. Table 1 shows that 8 publications were from Ghana (Acquah et al., 2021; Afum et al., 2023; Agyabeng-Mensah et al., 2020; Agyabeng-Mensah & Tang, 2021; Appiah et al., 2024; Asante-Darko & Osei, 2024; Baah et al., 2022, 2024), and 1 is from Nigeria (Mahmoud et al., 2022). These publications were done in the context of West African countries. Therefore, there is limited research in the domain of financial performance in supply chains within other African regions of the continent such as East African countries.

Furthermore, on closer assessment of the publications, different versions of SmartPLS have been the most common software application that has been used in analysing data by using PLS-SEM (Ringle et al., 2014, 2015, 2024). This proves the robustness of the tool in facilitating quantitative analytical procedures that focus on exploring relationships across several domains. Furthermore, majority of publications show that research on financial performance in supply chains within Africa is dominated with the context of SMEs in manufacturing, services, hospitality, logistics, and extractive industries (Acquah et al., 2021; Afum et al., 2023; Agyabeng-Mensah et al., 2020; Agyabeng-Mensah & Tang, 2021; Appiah et al., 2024; Asante-Darko & Osei, 2024; Baah et al., 2022, 2024; Mahmoud et al., 2022).

Table 1
Summary of Retrieved Journal Articles

S/n	Reference	Country	Focus and context(s)
1	Agyabeng-Mensah et al. (2020)	Ghana	The study examined the influence of internal green supply chain practices, green human resource management and supply chain environmental cooperation on firm performance. Data was collected from 139 manufacturing firms (food, beverage and alcohol, textiles, agrochemical and plastics).
2	Acquah et al. (2021)	Ghana	The study explores the linkage between green human resource management practices, green supply chain management practices and performance. Data was collected from 216 manufacturing and hospitality firms (Plastic manufacturers, textile factories, pharmaceuticals, agrochemical, restaurants, and hotels).
3	Agyabeng-Mensah and Tang (2021)	Ghana	The study explored the relationship among green human capital, green logistics practices, green competitiveness, social performance and financial performance. Data was collected from 152 manufacturing SMEs (Agrochemicals, electronics, beverages and food, pharmaceuticals, and textiles).
4	Mahmoud et al. (2022)	Nigeria	The study investigated the moderating effect of disruption orientation and government support on the relationship between COVID-19 operational disruption and SMEs' performance. Data from 170 SMEs was used in the final analysis (SMEs were from manufacturing and service sectors).
5	Baah et al. (2022)	Ghana	The study explored the influence of supply chain collaboration on supply chain visibility, stakeholder trust, environmental and financial performances. Data was collected from 170 SMEs in manufacturing sector. These SMEs were involved in wood, lumber products and processing, leather products and processing, textile and fabric products, food and Beverages, rubber and other plastic products, and stationery and allied products.
6	Afum et al. (2023)	Ghana	The study investigated the mediating roles of sustainable supply chain management and green radical product innovation in the link between sustainable entrepreneurial orientation and sustainability performance. Data was collected from 248 SMEs. These SMEs were involved in rubber and plastic, chemicals and related products, food products and beverage, leather products and processing, metals and roofing sheets, textile and fabric products, stationery and allied products, and wood, lumber products and processing.
7	Baah et al. (2024)	Ghana	This study examined the linkages between government influences, implementation of logistics services and supply chain innovations, firm performance and societal impact. Data was collected from 210 logistics and manufacturing firms.
8	Asante-Darko and Osei (2024)	Ghana	The study examined the mediating effect of firm capabilities on sustainable SCM practices and firm performance. Data was collected from 325 firms operating in manufacturing and services industries.
9	Appiah et al. (2024)	Ghana	The study examined the mediating effect of green performance in the relationship between sustainable SCM practises and firm performance. Data was collected from 245 large, medium and small-scale companies in extractive industry.

3.2 Main Findings on Factors Affecting Financial Performance

The first study as presented in Table 2 is the work by Agyabeng-Mensah et al. (2020). This study measured firm performance by using four items representing market and financial performances. The study investigated the impact of

internal green supply chain practices on green HRM, supply chain environmental cooperation, and firm performance, including mediating effects. Based on the data obtained from 139 manufacturing firms in Ghana, the study revealed that internal green supply chain practices significantly and negatively affected performance. On the other hand, green HRM and supply chain environmental cooperation significantly and positively affected performance. Similarly, adoption of ISO 14001 certification (a control variable) positively and significantly affected performance. Regarding the mediating effects, the findings from Agyabeng-Mensah et al. (2020) confirmed the existence of competitively partially mediating effects of green HRM and supply chain environmental cooperation in the relationship between internal green supply chain practices and performance. These findings revealed that the existence of internal green supply chain practices is a prerequisite for the proper implementation of green HRM and supply chain environmental cooperation to improve performance. Furthermore, supply chain environmental cooperation was found to have a complementary partial mediation role in relationship between green HRM and performance. In summary, the study confirmed that despite the negative role of internal green supply chain practices on performance, integrating other factors such as green HRM and supply chain environmental cooperation brings about the substantial positive outcome on performance.

The second study by Acquah et al. (2021) was done in Ghana and examined the link among green HRM practices, green SCM practices and performance. Specifically, the study explored the influence of green HRM on green SCM and eventually on operational, market, financial, social and environmental performances. Therefore, the structural model considered green SCM as a mediating variable. Based on the data obtained from 216 manufacturing and hospitality firms, the research confirmed a significant negative impact of green HRM practices on financial performance, while confirmed a positive significant impact of green SCM practices on financial performance. Furthermore, the analysis of the mediating role unveiled that green SCM practices competitively and partially mediated the relationship between green HRM practices and financial performance. These findings confirmed that even though green HRM practices have negative impact on financial performance, the presence of green SCM practices as a mediating variable enhances the positive outcomes towards achieving financial performance.

Agyabeng-Mensah and Tang (2021) explored the relationship among green human capital, green logistics practices, green competitiveness, social performance and financial performance. The study analysed data from 152 manufacturing SMEs in Ghana and established that green competitiveness and social performance did not have direct significant impacts on financial performance. However, green logistics practices significantly mediated the relationship between green human capital and financial performance. On the other hand, the mediating effects of green competitiveness and social performance on the established links were found to be not significant. Lastly, the study confirmed the significant impact of firm size (control variable) on financial performance. In these regards, Agyabeng-Mensah and Tang (2021) presents intriguing facts on the crucial role of green human capital and green logistics practices in achieving desired levels of financial performance. Based on the growing trends of sustainable practices in sub-Saharan Africa, this study presents novel insights regarding to the direct and indirect effects of several factors in exploring financial performance in supply chains.

In Nigeria, Mahmoud et al. (2022) investigated the moderating effect of disruption orientation and government support on the relationship between COVID-19 operational disruption and SMEs' performance. Based on the data collected from 170 SMEs in Nigeria, the study analysed when disruption orientation and government support moderated the relationship between COVID-19 operational disruption and SMEs' performance. The study's structural model considered the impacts on both financial and non-financial performance. However, the discussion of the current review is based on the financial performance. The findings unveiled that COVID-19 operational disruption had negative effects on both performances. However, it had no significant impact on financial performance (the impact on non-financial performance was significant). Furthermore, the impacts of disruption orientation and government support were not significant on financial performance (even though disruption orientation was found to have a significant positive impact on non-financial performance). On the other hand, no significant moderating effects of disruption orientation and government support on the main relations were reported. Despite the insignificant impacts in the most of hypothesised relationships, the study offers insights on the way SMEs in Nigeria reacted to health-related disruptions such as COVID in terms of financial and non-financial performance.

Baah et al. (2022) explored the way supply chain collaboration influences supply chain visibility, stakeholder trust, and both environmental and financial performance in operating SMEs within Ghanaian manufacturing sector. Based on the data collected from 170 SMEs, the study confirmed the significant positive impact of supply chain collaboration, supply chain visibility, stakeholder trusts and environmental performance on financial performance. The study considered these factors as crucial in affecting the positive outcome of financial performance across manufacturing firms within supply chains. Therefore, Baah et al. (2022) presents the strategic value of collaborative practices for enhancing performance of SMEs which is relevant in managing the supply chain dynamics.

Afum et al. (2023) explored how sustainable supply chain management and green radical product innovation mediate the relationship between sustainable entrepreneurial orientation and sustainability performance. This study considered sustainability performance dimensions which include financial, environmental and social performances.

Based on the data collected from 248 SMEs in Ghana, the study analysed the mediating effects of sustainable SCM and green radical product innovation in the main relationships. The study's findings revealed that sustainable entrepreneurial orientation had no significant direct impact on financial performance. However, sustainable SCM and green radical product innovation had positive significant impact on financial performance. On the other hand, the analysis unveiled full mediation role of sustainable SCM and green radical product innovation in the relationship between sustainable entrepreneurial orientation and financial performance of SMEs. Therefore, the influence of sustainable entrepreneurial orientation on financial performance emerged only through the mediators. This study is crucial in the research domain as it contributes in understanding a unified model that underscores the full mediating roles of sustainable SCM and green radical product innovation in financial performance.

Baah et al. (2024) examined the linkages between government influences, implementation of logistics services and supply chain innovations, firm performance and societal impact. This study based on the data collected from 210 SMEs in Ghana and explored the influence of government influences (regulatory coercion and government subsidisation) on logistics and supply chain innovations. Also, the study examined the influence of logistics and supply chain innovations on financial performance, logistics and supply chain robustness, and green competitiveness as among other hypothesised relationships with firm size as a control variable. The study's findings unveiled that logistics supply chain innovations had a positive significant impact on financial performance. On the other hand, firm size is positive but not significant related to firm performance. Therefore, among the two relationships analysed in the study which are linked to financial performance. Logistics and supply chain innovation mattered in explaining statistically significant impact on financial performance. Although firm size showed a positive relationship with financial performance, the effect was not statistically significant.

Asante-Darko and Osei (2024) examined the mediating effect of firm capabilities in the relationship between sustainable SCM practices and firm financial performance. Based on data that was collected from 325 firms operating in manufacturing and services industries in Ghana, the study examined the influence of three facets of sustainable SCM which include economic, environmental, and social SCM on firm capabilities and firm financial performance. The investigation also included firm capabilities as a mediating variable in the main relationships. Through the triple bottom line lens, the study's findings confirmed that all three facets of sustainable SCM (economic, environmental, and social) have positive significant impact on firm financial performance. Furthermore, firm capabilities significantly and positively affected firm financial performance. Also, Asante-Darko and Osei (2024) established that firm capabilities partially mediate the influence of all facets of sustainable SCM (economic, environmental, and social) on firm financial performance. Lastly, all control variables (firm age, firm size and firm type) had positive significant impact on firm financial performance. The study's findings imply that emphasis on sustainable SCM practices enhance firms' capabilities, which in turn lead to better firm financial performance.

Appiah et al. (2024) examined the mediating effect of green performance in the relationship between sustainable SCM practises and firm performance. This study tested the relationships that include green purchasing, reverse logistics, environmental cooperation, and internal environmental management as sustainable SCM practices and green performance as a mediating variable, and firm financial performance as an outcome variable. The study involved data that was collected from 245 large, medium and small-scale companies in Ghanaian extractive industry. The findings unveiled that green performance positively and significantly affected firm financial performance. On the other hand, green performance was found to be a significant mediator in the influence of sustainable SCM practices (green purchasing, reverse logistics, environmental cooperation, and internal environmental management) on firm financial performance. These findings confirm the indirect effects of sustainable SCM practices on firm financial performance through green performance. The study by Appiah et al. (2024) adds to the literature on firm financial performance in supply chains within Africa by integrating the conceptual model that connects sustainable SCM practices, green performance and firm financial performance.

Table 2*Main Findings on Factors Affecting Financial Performance*

S/n	Reference	Main factors	Main significant results
1	Agyabeng-Mensah et al. (2020)	Internal green supply chain practices Green HRM Supply chain environmental cooperation ISO 14001 certification (control variable)	Internal green supply chain practices negatively affect performance. Green HRM and supply chain environmental cooperation positively affects performance. Internal green supply chain practices indirectly affect performance through supply chain environmental cooperation and green HRM. Supply chain environmental cooperation and green HRM jointly mediated the influence of internal green supply chain practices on performance. ISO 14001 certification positively affects performance.
2	Acquah et al. (2021)	Green HRM practices Green SCM practices	Green HRM practices negatively affect financial performance. Green SCM practices positively affect financial performance. Green HRM practices indirectly affects financial performance through green SCM practices.
3	Agyabeng-Mensah and Tang (2021)	Green human capital Green logistics practices Firm size (control variable)	Green human capital, and green logistics practices positively affects financial performance. Green human capital indirectly affects financial performance thorough green logistics practices. Firm size that has significant influence on financial performance.
4	Mahmoud et al. (2022)	<i>No significant factors</i>	<i>No significant factors linked to financial performance</i>
5	Baah et al. (2022)	Supply chain collaboration Supply chain visibility Stakeholder trust Environmental performance	Supply chain collaboration, supply chain visibility, stakeholder trust and environmental performance positively affect financial performance.
6	Afum et al. (2023)	Sustainable SCM Green radical product innovation Sustainable entrepreneurial orientation	Sustainable SCM and green radical product innovation positively affect financial performance. Sustainable entrepreneurial orientation indirectly affects financial performance through sustainable SCM and green radical product innovation.
7	Baah et al. (2024)	Logistics and supply chain innovations	Logistics and supply chain innovations positively affects financial performance.
8	Asante-Darko and Osei (2024)	Economic SCM Environmental SCM Social SCM Firm capabilities Firm size (control variable) Firm age (control variable) Firm type (control variable)	Economic, environmental and social SCM positively affect firm financial performance. Firm capabilities positively affect firm financial performance. Economic, environmental and social SCM indirectly affect firm financial performance through firm capabilities. Firm size, firm age, and firm type positively affect firm financial performance.
9	Appiah et al. (2024)	Green performance Green purchasing Reverse logistics Environmental cooperation Internal environmental management	Green performance positively affects firm financial performance. Green purchasing, reverse logistics, environmental cooperation, and internal environmental management indirectly affect firm financial performance through green performance.

3.3 Summary of Factors Affecting Financial Performance

Table 3 presents a summary of main factors affecting financial performance in supply chains within Africa as per the reviewed studies. These are only factors with significant effects. The results in Table 3 also show the direction of each factor as per the reviewed journal article. It should be noted that out of 9 articles, only 8 presented variables that have significant direct or indirect impact on financial performance.

3.3.1 Factors with Negative Direct Impact on Financial Performance

Internal green supply chain practices (Agyabeng-Mensah et al., 2020), Green HRM practices (Acquah et al., 2021). These variables have negative significant direct impact on financial performance. They imply that the increase in them leads to less financial benefits to the firms. The plausible explanation can be due to the costly nature of green practices to most of SMEs. Therefore, in most cases, SMEs are less likely to finance green practices such as internal

green supply chain practices and green HRM practices due to financial constraints that impact overall financial performance.

3.3.2 Factors with Positive Direct Impact on Financial Performance

Green HRM and supply chain environmental cooperation (Agyabeng-Mensah et al., 2020) Green SCM practices (Acquah et al., 2021) Green human capital and green logistics practices (Agyabeng-Mensah & Tang, 2021) Supply chain collaboration, supply chain visibility, stakeholder trust and environmental performance (Baah et al., 2022) Sustainable SCM and green radical product innovation (Afum et al., 2023) Logistics and supply chain innovations (Baah et al., 2024) Economic SCM, environmental SCM, social SCM, and firm capabilities (Asante-Darko & Osei, 2024) Green performance (Appiah et al., 2024).

3.3.3 Factors with contradictory findings

Green HRM had a positive significant impact (Agyabeng-Mensah et al., 2020), while (Acquah et al., 2021) reported a negative significant impact on financial performance.

3.3.4 Factors with an Indirect Positive Impact on Financial Performance through Mediators

Internal green supply chain practices (Agyabeng-Mensah et al., 2020), with green HRM and supply chain environmental cooperation as mediators Green HRM practices (Acquah et al., 2021), with Green SCM practices as a mediator Green human capital (Agyabeng-Mensah & Tang, 2021), with green logistics practices as a mediator Sustainable entrepreneurial orientation (Afum et al., 2023), with sustainable SCM and green radical product innovation as mediators. Economic SCM, environmental SCM, and social SCM (Asante-Darko & Osei, 2024), with firm capabilities as a mediator Green purchasing, reverse logistics, environmental cooperation, and internal environmental management (Appiah et al., 2024), with green performance as a mediator.

3.3.5 Control variables with Significant Effects on Financial Performance

ISO 14001 certification (Agyabeng-Mensah et al., 2020) Firm size (Agyabeng-Mensah & Tang, 2021; Asante-Darko & Osei, 2024) Firm age, and firm type had positive significant impact on financial performance (Asante-Darko & Osei, 2024).

Table 3

Summary of Factors Affecting Financial Performance

Reference	Factors	Direct impact (direction)	Indirect impact (direction)	Mediating variable (direction)	Control variable (direction)
Agyabeng-Mensah et al. (2020)	Internal green supply chain practices	✓ (-)	✓ (+)		
	Green HRM	✓ (+)		✓ (+)	
	Supply chain environmental cooperation	✓ (+)		✓ (+)	
	ISO 14001 certification				✓ (+)
Acquah et al. (2021)	Green HRM practices	✓ (-)	✓ (+)		
	Green SCM practices	✓ (+)		✓ (+)	
Agyabeng-Mensah and Tang (2021)	Green human capital	✓ (+)	✓ (+)		
	Green logistics practices	✓ (+)		✓ (+)	
	Firm size				✓
Baah et al. (2022)	Supply chain collaboration	✓ (+)			
	Supply chain visibility	✓ (+)			
	Stakeholder trust	✓ (+)			
	Environmental performance	✓ (+)			
Afum et al. (2023)	Sustainable SCM	✓ (+)		✓ (+)	
	Green radical product innovation	✓ (+)		✓ (+)	
	Sustainable entrepreneurial orientation		✓ (+)		

Baah et al. (2024)	Logistics and supply chain innovations	✓ (+)			
Asante-Darko and Osei (2024)	Economic SCM	✓ (+)	✓ (+)		
	Environmental SCM	✓ (+)	✓ (+)		
	Social SCM	✓ (+)	✓ (+)		
	Firm capabilities	✓ (+)		✓ (+)	
	Firm size				✓ (+)
	Firm age				✓ (+)
	Firm type				✓ (+)
Appiah et al. (2024)	Green performance	✓ (+)		✓ (+)	
	Green purchasing		✓ (+)		
	Reverse logistics		✓ (+)		
	Environmental cooperation		✓ (+)		
	Internal environmental management		✓ (+)		

IV. CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

This review employs a SLR and content analysis to analyse studies that utilise PLS-SEM in exploring financial performance in supply chains in Africa. The study establishes different factors that have direct, indirect, or mediating effects on financial performance. Also, control variables have been identified in explaining the effects of given variables on financial performance. The current review presents a number of factors affecting financial performance within Africa in the context of supply chains. While 8 out of 9 articles reported variables with either direct or indirect significant impacts, the findings reveal a complex picture. Factors such as internal green supply chain practices and green HRM practices, were found to negatively affect financial performance. This could be likely due to the high costs and financial constraints faced by SMEs. On the other hand, a broader set of factors including green SCM, supply chain environmental cooperation, green human capital, green logistics practices, supply chain collaboration, logistics and supply chain innovations, sustainable SCM, firm capabilities and green performance showed a significant positive direct impact.

Additionally, green HRM, supply chain environmental cooperation, green SCM practices, green logistics practices, sustainable SCM, green radical product innovation, firm capabilities and green performance are positive mediators towards enhancing financial performance. Some of the reviewed articles presented control variables like ISO 14001 certification, firm size, age, and type that played a significant role in influencing financial performance. Interestingly, this review unveils the existence of contradictory findings regarding the role of green HRM on financial performance, with studies presenting positive and negative effects. These findings suggest that the influence of green HRM on financial performance among firms in supply chains may be depending on the context and hence, requires further investigation.

4.2 Recommendations

These conclusions present crucial insights for practitioners across firms in supply chains within Africa to consider several factors to achieve financial performance. The identified factors with positive contributions are considered as the most determinants of financial performance in supply chains in Africa. The factors are crucial because they yield positive impacts on explaining financial performance. Therefore, the need for utilising them effectively becomes paramount for firms to achieve desired levels of financial performance. Similarly, the current review provides the basis for future researchers to consider more factors in exploring financial performance. This is relevant as the review identified studies from Ghana and Nigeria and hence, scant empirical evidence from other African countries stimulate future research in more exploration of financial performance in supply chains. Furthermore, there is scant evidence on the moderating variables in the relationship between factors of interest and financial performance. This requires further research as moderating variables in PLS-SEM help to explain the conditions under which certain variables (factors) are related to financial performance.

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