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Evaluating the effects of customs policy on supply chain performance

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ABSTRACT

This paper explores the effects of customs policies on supply chain performance in Jordanian small and medium-sized enterprises (SMEs). The success of SME supply chains is a strategic imperative for inclusive economic development in Jordan, where they serve as key engines of growth and employment. Unfortunately, many administrative barriers are intrinsic to inefficient customs protocols which severely handicap the abilities of SMEs. The research uses the SEM-PLS analysis on 197 of SMEs directly involved in customs clearance, logistics and allied activities traded to gather field survey via spread this study among employees as partake. The resulting findings suggest that effective, transparent and long-term focused customs systems are drivers of SME success in their supply chains over key dimensions such as cost effectiveness, agility and service experience. Further, sustainability adoption completely mediates the latent between customs incentives and supply chain performance improvements. Therefore, rational customs reforms championing environmental consciousness can significantly boost productivity, competitiveness and resilience of Jordanian SME supply chains. Both public policymakers and SME managers can apply these valuable evidentiary conclusions to craft customized administrative protocols and strategic responses attuned to the unique needs and constraints facing smaller Jordanian enterprises. Ultimately, supportive customs environments provide crucial launchpads for unlocking the fullest potential of SMEs.

Keywords: *Enterprise Growth, Policies, Success, Sustainable, SmartPLS4.*

1. Introduction

Small and medium-sized enterprises (SMEs) are the backbone of Jordan's economy, comprising over 99% of registered firms, contributing approximately 50% of GDP, and providing critical innovation and job opportunities (JSF, 2018; World Bank, 2020). However, Jordanian SMEs face considerable vulnerabilities due to resource constraints, global competition, and administrative hurdles in conducting both domestic and international trade (Kinani & Senyigit, 2022; Obeidat et al., 2021). As Jordan is strategically positioned between Europe, Africa, and Asia, the success of SME supply chains in moving products, services, and information across borders is particularly imperative for the country's continued economic expansion (Awad, 2020; EMRC, 2021). In this context, streamlining customs policies and procedures emerges as a priority area if Jordanian SMEs are to leverage trade openness for bolstering their productivity, profitability, and international competitiveness (Almatarneh et al., 2022; Hamad & Darwazeh, 2021). Despite the strategic impact customs administration can exert on SME supply chain performance, empirical evidence focusing specifically on Jordanian SMEs remains scarce (World Bank, 2020).

Previous studies that mainly scrutinized taxation policies and regulations but the specific repercussions of current Jordanian customs policies on SME supply chain performance lack exploring (Al-Zaqeba & Al-Rashdan, 2020). Customs-related administration as a part of the supply chain is very important which leads to trade facilitation, economic competitiveness and success in global supply chains (Awad, 2020; EMRC, 2021). This is particularly the case in Jordan, where customs policies had a major role to play and its performances passed through several industrial sectors (Almatarneh et al., 2022). This will be to our acknowledge, the first study on how customs regulations impact Jordanian enterprises that are small and medium-sized (SMEs), which play an essential role in country economy (Hamad and Darwazeh, 2021; World Bank, 2020). SMEs account to over 99 of business registered in Jordan, and contribute about half the country's GDP as well serve an essential role for innovation, employment opportunities and growth (Jordan Strategy Forum, 2023). Archives Nevertheless, they still suffer from cash-flow problems, high overheads and administrative burdens that can be worsened by inefficient customs procedures (Obeidat et al., 2021). Whether Jordanian SME supply chains can effectively break into regional and global markets depends largely on streamlining clearance mechanisms, along with enhanced customs efficiency (Kinani and Senyigit, 2022). This being added to prevails Jordanian SMEs ineffectiveness in supply chain across efficiency, flexibility and quality; this paper contributes by exploring the impact of customs policy on these success dimensions as it is lacking. They also investigate the moderating role of sustainable and environmentally friendly practices for full-contextual understanding.

2. Literature Review

In Jordan, Small and Medium-Sized Enterprises are over 99% of registered companies with strategic importance to the national economic growth, innovation, and employment (JSF, 2018). SMEs in Jordan are among the most vulnerable companies due to insufficient resources, international competition, and numerous trade-related administrative barriers. In this context, one of the significant policy options for governments is customs administration that may alleviate barriers to efficiency and success in SME supply chains across borders and in global competition; some researchers have noted that customs are a traditional bottleneck of global trade. Recent studies have shown that efficient and robust customs is a critical enabler of successful supply chains and their sustainability, primarily in certain regions such as Jordan. Ababneh et al. (2023) provide empirical evidence that customs procedures in certain regions have a significant impact on the environmentally sustainable practices and eco-efficiency of trade. Alshura et al. (2023), similarly, find links between organizational customs practices, leadership, and knowledge management in the field strengthening trade operations. However, investigations centered specifically on Jordanian SMEs remain scarce, despite their economic

importance (Elseoud et al., 2019). As SMEs often lack adequate buffers, they remain vulnerable to supply chain disruptions and administrative impediments in conducting cross-border transactions (Almajali et al., 2016). Therefore, the relationship between prevailing customs policies and SME supply chain success warrants urgent scholarly attention.

Some studies have explored related aspects in other contexts – Al-Shboul (2023) verified that risk analytics adoption improved predictive capacities for SMEs supply chains. But the specific role of customs protocols was unaddressed. Meanwhile Al-Hyari (2023) focused on determinants of export promotion among Jordanian SMEs without implicating customs procedures. Therefore, this literature review emphasizes the need to investigate the impact of customs mechanisms on SME supply chain performance specifically. Any nation's customs regulations have a significant impact on how successfully supply chains, and Jordan is no exception (Al Khatib, 2022; Abdul Aleem, 2022; Abdalla et al., 2022; Abu Eyadah and Kinani, 2023). However, despite this intimated influence, empirical investigations focusing exclusively on how prevailing Jordanian customs regulations affect domestic SME supply chain performance remain scarce. Certain studies have explored adjacent facets like taxation policies, sustainability practices, and overall supply chain efficiency at a macro-level (Al-Zaqeba & Al-Rashdan, 2020; Jarah et al., 2022). However, the specific mechanisms and processes through which customs rules shape efficiency, costs, flexibility and quality aspects across Jordanian SME supply chains warrant dedicated examination.

In other national contexts, Heijmann et al. (2020) have traced the evolving role of customs and its deeper integration with contemporary supply chain strategies and trade facilitation objectives. Pan et al. (2015) have proposed conceptual frameworks for coordinating customs processes under circular economy paradigms promoting sustainability. Still, the impact of customs policies remains relatively underexplored in literature, especially regarding SMEs who constitute the highest share of private sector establishments

2.1 Supply Chain Success

A review of the relevant literature provides a rich trove for explorative research in supply chain dynamics, sustainability and likely consequences emanating from customs policies. The concept of sustainable supply chains underlines the need to integrate social, environmental, and economic objectives for long-term viability (Jarah et al., 2022). In fact, supply chain health - or lack thereof in this pandemic economy - is perhaps no longer just a logistical concern; effective chains are among the significant sustains of global business competitiveness. A great deal of research has investigated the success factors associated with contemporary supply chains such as technology adoption, green practices, lean systems and risk management (Biswas et al., 2023; Vu et al., 2023; Iqbal et al., 2023; Kessy et al., 2023; Maabreh, 2024; Alshehadeh et al., 2024; Jebril et al., 2024; Lootah, 2024; Al Rousan, 2024; Shubailat et al., 2024). However, Al-Zaqeba and Al-Rashdan (2020), little has been written on particular tax legislation or customs that may support supply chain performance. Many other studies have contributed valuable bits and pieces to the puzzle in adjacent areas. For example, Dora et al. 2022 noted the role of artificial intelligence in supply chain efficiency and decision-making improvements but did not mention regulatory preconditions for effective AI adoption. Chae et al. 2022 researched supply chain structural shifts due to M&As and did not pay attention to policy issues. These examples imply a growing level of sophistication in supply chain strategies and, thus, policy relevance, but at the same time they illustrate the analytical separation. In this regard, it is clear that while existing research recognizes the increasing complexity of the modern supply chains, several issues remain under-investigated. One of these aspects is tax policies, as well as customs regulations and the relationships between them and the measurable supply chain success and sustainability adoption. In general, policy tools are primary instruments employed by governments to implement their economic, social, and environmental priorities. Customs regulations are some of the most significant policies due to the emerging globalization. However, despite their importance, they are also among the least studied policy levers regarding their implied connections to the supply chain capabilities and sustainability outcomes. With the ongoing development of globalization and supply chain links between

countries and regions, including such global projects as China's Belt and Road initiative and multilateral agreements like the African Continental Free Trade Area, opportunities and regulatory complexity for supply chain professionals and policymakers will only continue to grow. Therefore, scholarly insights into the relationships between customs rules, sustainability adoption, and supply chain success have practical importance for both governments and businesses that are required to operate in the ever more complex environment. The current study aims to contribute to this knowledge with regard to the strategic Jordanian environment.

2.2 Customs Policies

Research into the practice of customs regulations and its effects across various dimensions on the modus operandi of contemporary supply chains has increasingly attracted scholarly interest. As the world's networks of trade and commerce have continued to expand, often supported by national policies promoting open trade, the practice of customs administration has grown in prominence as drivers to connect external influences with domestic priorities.

Nonetheless, it was based on evidence and findings from studies, especially in different context-specific studies. For instance Boogaard and Beach (2023) emphasize how advancements in the development of supply chains often do not occur in underdeveloped rural areas with poor enforcement mechanisms crippling tax benefits. Such findings support the stipulated governance requirements for supply chain development. Furthermore, Cantens and Raballand (2021) highlight the complexity faced by policy makers while attempting to introduce flexible customs reforms that are mindful of environmental stimuli that change rapidly. Besides, there is a competitive dimension implemented to customs regulations; through the evidence offered by Beyond ET AL. (2019), well-regulated customs administration helped reduce Russia's trade costs, which escalated international supply chain integration. The European Union is well known for liberalizing trade as well as common markets, and, therefore, it is an appropriate focal entity due to its sophistication in understanding development as elucidated by Anda et al. (2020). Moreover, Li (2019) indicates the e-commerce potential that was set to benefit from the transformational customs mechanisms, which provide a seamless transaction experience across the globe.

2.3 Customs Policies toward Supply Chains Success

Against the intimated impact of customs protocols on cross-border trade flows and supply chain landscape (gando et al, 2001), scholarly debates focused entirely in this nexus is quite rare particularly from a lens to understand implications towards success at the manufacturing sector. However, related investigations provide indirect support. Like, Souhli and En-Nadi (2023) who reviewed factors that drive organizations to adopt green supply chain management (GSCM), without putting it inconsequence the association with statutory levers in place at borders like customs rules. On the contrary, Amiri-Pebdani and co-workers [(2022) also studied the effects of pricing mechanisms on energy sustainability in policy-free supply chains. These studies show the increase of supply chain sophistication in economic and environmental sense, which validate the need to investigate potential policy enablers. Supply chain innovation of today goes beyond the focus on sustainability (although emerging solutions such as blockchains are presented to improve tracking, trust and transparency; see Brookbanks & Parry, 2022; Raja et al., 2022). Nevertheless, they remain to some extent dependent being validated against agreeable rules by border checks and gateways internationally. As such, studies that focus solely on customs regimes either enabling or limiting complex supply chain structures in these same parts of the word would be particularly timely. The industrial shifts also point toward a competitive perspective on the policy relevance; Grover and Dresner (2022) argue supply chain effectiveness as one of the strategic priorities for political leverage without specifying how such configurations can relate to customs environment.

3. Hypothesis Development

The literature review synthesizes an array of existing analyses that have examined discrete facets related to supply chains, customs regulations, and sustainability considerations. The literature review integrates insights from diverse studies focused on specific aspects of supply chains, customs policies, and sustainable practices. This review consolidates findings from scholarly investigations concentrating individually on supply chain dynamics, customs protocols, and adoption of environmental sustainability. However, multiple analyses substantiate the influential role customs protocols play in either enhancing or constraining supply chain capabilities and trade flows (Anda et al., 2020; Heijmann et al., 2020).

At the same time, sustainability practices acceptance has become a necessity for supply chain success in 21st century (Jarrah et al., 2022; Ali et al., 2023). The importance of Jordan as a center for transit trade at the intersection point between Asia, Europe and Africa stresses further on this need of having efficient customs tools. At the same time, there is nothing better for long-term resilience of our supply chains on earth than greening. Still, there is a relatively limited amount of research that provides insight into how customs regulations are related to sustainability practices and supply chain success in Jordan (Aleem, 2022; Adaileh, 2020; Abdalla et al., 2022; Alezaibe, 2022; Almaweri, 2023; Eyadah and Al Khatib, 2022; Alshiha, 2023)

This study is adversarial in approach and therefore hypothesizes that Jordanian customs policies are significantly more influential over efficiency, cost structure perceptions through comparison with service quality of the supply chain (H1). The efficient, transparent and predictable customs procedures translate immediately to increased trade flows and oilier in the supply chain (Al-Shuwaikhat 2019). Moreover, customization of incentives and trade facilitation systems that align with environmental objectives can be stimulated by customs reforms for the development (H2) reasons (Heijmann et al., 2020; Vu et al., 2023). The sway of sustainability practices hangs on contemporary supply chains during an era when global expectations for ethical and eco-friendly conduct are mounting the world over (Silvestre, 2015; Ali et al., 2023). Thus, sustainability implementation inherently is a positive antecedent to supply chain success (H3), this represents the crucial bridging factor of them all and can help in meeting perchance H4, that customs protocols affects performative outputs (Hamid et al., 2022; Al-Zaqeba et al., 2023; Al-Taani et al., 2023; Soltani, 2023; Barqawi, 2023; Shubailat et al., 2024a; Jarrah et al., 2024). Sustainable uptake is influenced by customs mechanisms that then dictates whether or not the supply chain succeeds. To the best of our knowledge, none has offered direct evidence on such relationship within Jordan; other insights that could be found are dispersed and have not yet been synthesized into a hypothesis regarding to customs regulations - sustainability adoption- overall supply chain performance.

4. Research Model

This paper builds on the prior section by providing a more integrative conceptual model describing hypothesized linkages between customs regulations, sustainability, and observable signature outcomes of supply chains. According to prior literature, customs procedures are crucial for trade contracts ease or hindrance (Anda et al., 2020; Heijmann et al., 2020). Simplified customs procedures lead straight into increased supply chain productivity and reduced trade costs. Hence, following the aggregated evidence, this study suggests that current customs policies affect several dimensions of supply chain success far more than specified in existing models. Furthermore, a number of studies show that custom procedures could effectively promote the implementation of sustainability by providing information concerning how to qualify for environmental-friendly trade (Al-Shuwaikhat 2019; Vu et al. The research model is therefore illustrating customs policies as antecedents that are central to budging sustainability practices of the supply chain actors. Also, reiterated through studies of Silvestre (Silvestre 2015) and others, the implementation eco-friendly processes contribute to direct betterment in terms of costs, quality service provision as well as resiliency-the essential components for supply chain performance. The model therefore suggests that sustainability is the key driver of measurable success. Finally, by catalyzing sustainability uptake customs protocols indirectly positively shape supply chain success. Therefore, sustainable practices represent a key intermediary mechanism between customs regulations and observable performance outcomes. Figure (1)

visually depicts these hypothesized relationships that will be empirically tested through gathering and analysis of pertinent data.

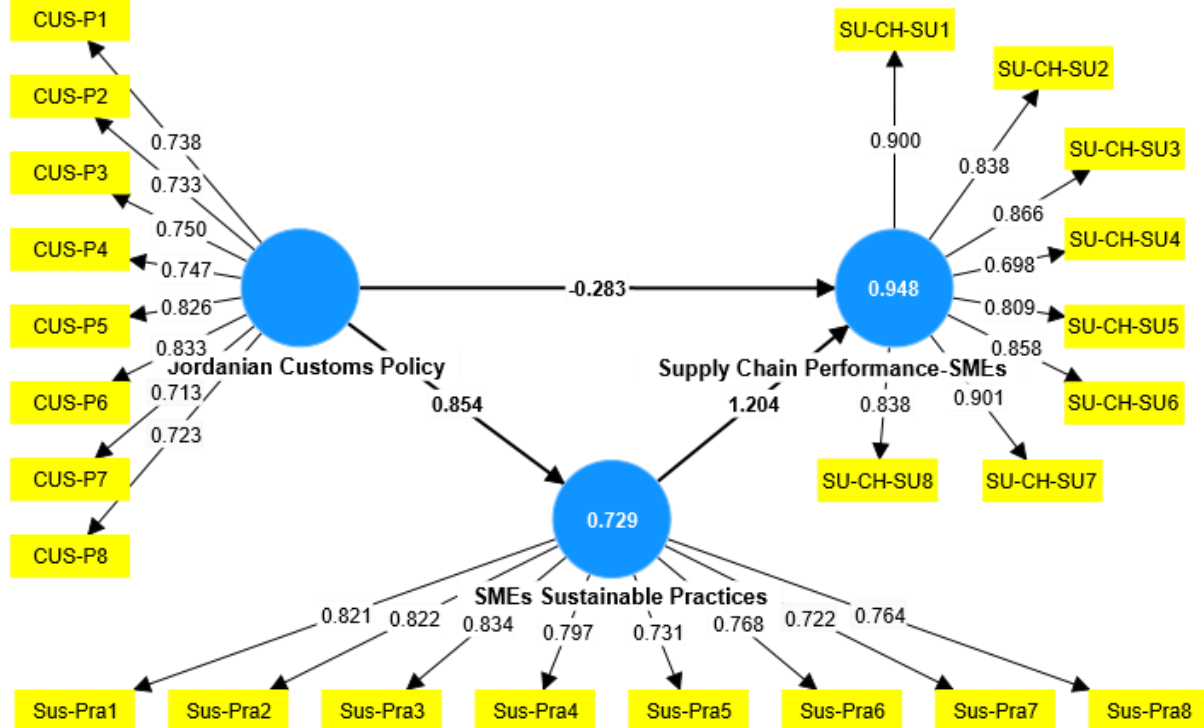


Figure (1): Research Model

5. Methods

This paper adopts a quantitative methodology to empirically examine the conceptual model and test the hypothesized relationships using primary data. A structured questionnaire is distributed to professionals across Jordanian firms directly engaged in key supply chain activities related to customs clearance, logistics and transportation. Respondents represent suitable sources of field insights based on their specialized experience navigating operational intricacies at the interface between governmental customs protocols and routine supply chain execution. In addition, survey instrument comprises reflective multi-item measures adapted from existing literature to assess key constructs within the research model including customs policies, sustainability adoption, and facets of supply chain success. All items are anchored on five-point Likert scale eliciting perceptions regarding the degree of expressed trait. The target population comprises employees of small, medium and large organizations involved in customs processing, shipping and delivery roles central to cross-border trade. Using census sampling, the self-administered questionnaire is distributed to 328 respondents out of which 197 complete responses are obtained representing an acceptable response rate. Moreover, Structural Equation Modeling (SEM) constitutes an appropriate technique for empirically evaluating the measurement properties of latent multidimensional constructs and testing the structural relationships between them. Specifically, Partial-Least-Squares Structural-Equation-Modeling (PLS-SEM) is applied using the SmartPLS44 software to validate the measurement models and path coefficients in the conceptual framework based on survey data. PLS-SEM remains robust for relatively small samples while handling complex interrelationships. Results offer empirical substantiation regarding the research hypotheses.

6. Results

Confirmatory factor analysis is conducted to assess the measurement properties of the multi-item reflective constructs within the conceptual framework. Initial results indicated issues with indicator validity for one item with inadequate factor loadings below the 0.70 threshold (SU-CH-SU4) thus, SU-CH-SU4 were deleted due to factor loading which was less than 0.70.

Eliminating empirically underperforming items enhances content validity ensuring one-dimensionality of the measurement scales. In addition, the final purified scales demonstrate acceptable construct validity. All retained items load highly on their respective factors exceeding 0.70 cutoff, establishing indicator reliability. Values for composite reliability also surpass 0.70, confirming internal consistency. Moreover, average variance extracted (AVE) estimates are greater than the suggested 0.50 level across all factors, validating convergent validity implying items effectively capture their assigned construct variance. Finally, the square root of AVE exceeds inter-construct correlations verifying discriminant validity as unique factors. However, the key reflective scale validity metrics of item loadings, composite reliability and average variance extracted have been captured in Figure (2) as the follow.

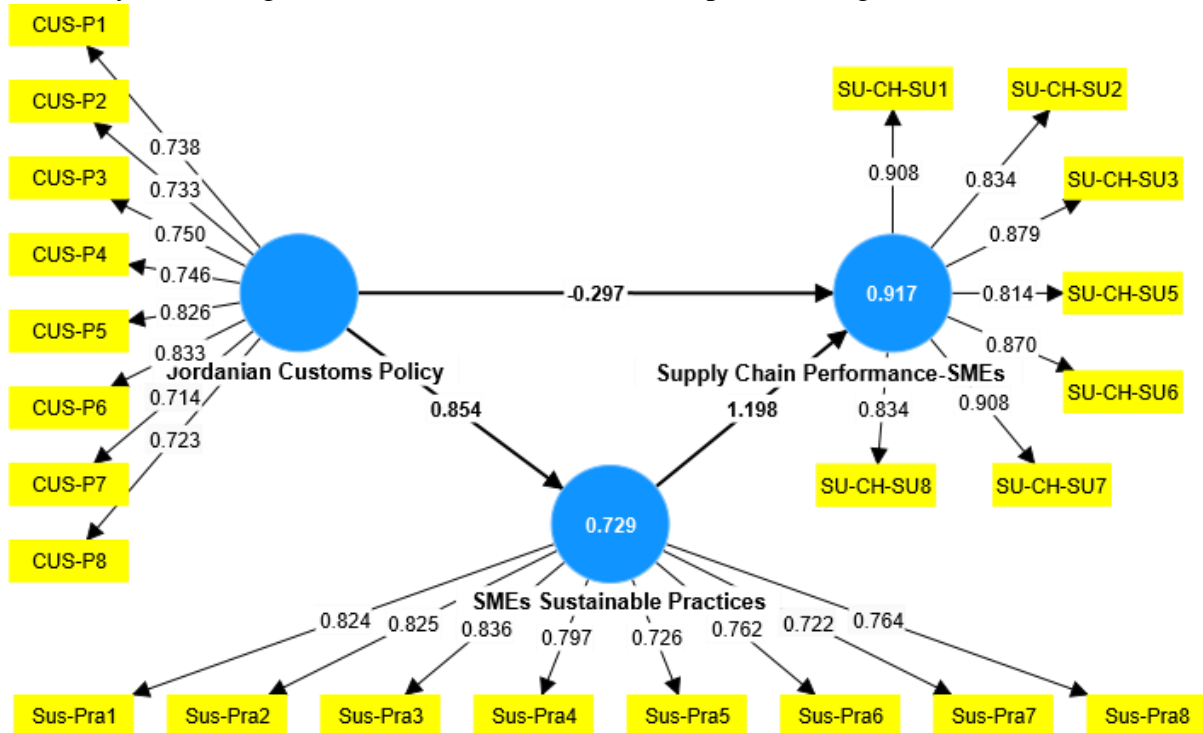


Fig (2): Validity Results

As depicted in Figure (2) above, the measurement model assessing the properties of reflective indicators surpasses established thresholds, substantiating scale validity. All retained items demonstrate factor loadings exceeding 0.70 on their respective constructs signifying acceptable item reliability as per Hair et al. (2017). Moreover, the model satisfies composite reliability over 0.80 and average variance extracted higher than 0.50 across all research variables, further validating internal consistency and convergence as described by Fornell and Larcker (1981). Therefore, analysis confirms that the measurement scales effectively capture their assigned constructs, enabling further assessment of the structural relationships hypothesized in the research framework. Table (1) below summarizes the consolidated estimates for core validation metrics, emphasizing the rigor and consistency of the measurement factors leveraged for path analysis.

Table (1): Reliability Testing

	Cronbach's alpha	Composite reliability (rho_a)	(AVE)
Jordanian Customs Policy	0.895	0.899	0.576
SMEs Sustainable Practices	0.910	0.913	0.613
Supply Chain Performance-SMEs	0.943	0.943	0.748

Table (1) above exhibits the consolidation of core reliability and validity estimates obtained for the measurement models associated with each research construct. A pivotal metric signalling model adequacy is R^2 denoting the proportion of variance in endogenous constructs explained by associated exogenous factors. Values range from 0 to 1 with higher estimates indicating greater predictive accuracy. According to Cohen (1988), R^2 thresholds of 0.26, 0.13 and 0.02 respectively signify substantially large, moderate or weak effects. Table (2) ahead summarizes the R^2 obtained. Higher values will affirm greater explanatory power and substantive connections between customs policies, sustainability adoption and supply chain performance.

Table (2): R^2 results

	R-square	R-square adjusted
SMEs Sustainable Practices	0.729	0.727
Supply Chain Performance-SMEs	0.917	0.917

As exhibited in Table 2, the R^2 value obtained for sustainable practices (endogenous variable) stands at 0.729. This implies that 72.9% of the variance in sustainability adoption is explained through the single predictor construct of customs regulations. The substantial magnitude verifies that Jordanian customs protocols play an instrumental role in shaping the embrace of environmentally-conscious practices by supply chain entities. Additionally, supply chain success (endogenous) returns an R^2 of 0.917 denoting that 91.7% of variability is accounted for by the two exogenous constructs of customs policies and sustainable practices. This reaffirms notable explanatory power and substantive connections between customs mechanisms, mediating sustainability adoption and downstream supply chain performance. However, the predictive accuracy estimates validate the conceptual premises regarding customs regulations and sustainability embrace influencing supply chain outcomes. The high R^2 values obtained confirm that the exogenous constructs do reliably engender significant variation in the endogenous variables under investigation. This attests to the research model's adequacy for additional assessment using PLS-SEM path coefficients and bootstrapping. Several core indicators produced through Smart-PLS4 analysis determine relationship significance and interpret structural model predictions. These include path coefficients, t-statistics, p-values and standard errors quantified through bootstrapping procedures. Thresholds related to these metrics signal the magnitude, direction and significance of hypothesized linkages between customs factors, sustainability antecedents and supply chain success outcomes. Figure 3 and Table 3 ahead exhibit the bootstrapping results to enable testing of the postulated relationships.

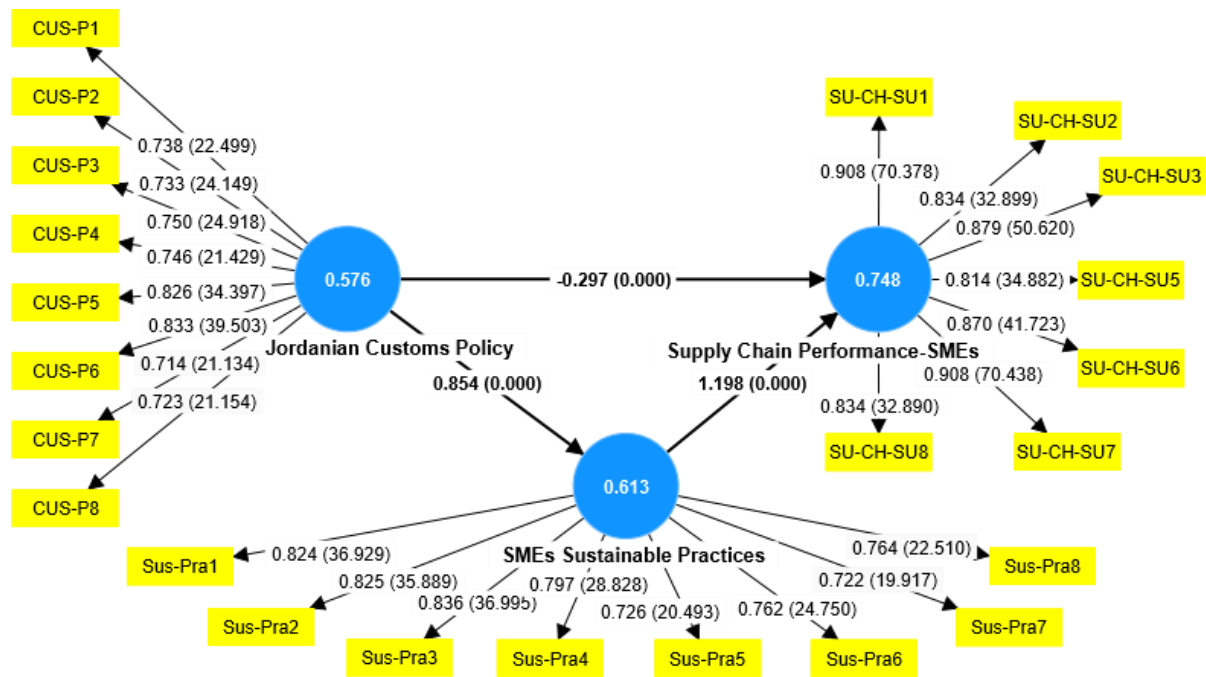


Fig (3): Hypothesis-Results

Figure 3 pictorially depicts the PLS-SEM outputs exhibiting hypothesized relationships within the structural model. The beta coefficients represent the estimated path connections flowing from customs policies via sustainable practices towards supply chain success. Their directionality and magnitude enable initial inference. Additionally, the graphic visualizes values for t-statistics, standard errors and p-values extracted through bootstrapping analysis to determine linkage significance. As compiled in Table 3, results offer empirical evidence regarding the stated hypotheses which postulated specific positive effects of customs regulations and sustainability on supply chain performance. The threshold criteria for relationship significance rely on t-statistics above 1.96, standardized path coefficients nearing 1 and p-values below 0.05 cutoff. Relationships fulfilling these criteria affirm significant positive effects between variables and accept the hypotheses. Contrastingly, estimates below benches imply insignificance warranting hypothesis rejection.

Table (3): Hypothesis Testing

Path	β	STDEV	T-values	P-Values
Direct Effect				
Jordanian Customs Policy -> SMEs Sustainable Practices	0.854	0.020	41.801	0.000
Jordanian Customs Policy -> Supply Chain Performance-SMEs	0.297	0.038	7.767	0.000
SMEs Sustainable Practices -> Supply Chain Performance-SMEs	1.198	0.030	39.565	0.000
Indirect effect				
Jordanian Customs Policy -> Supply Chain Performance-SMEs	1.023	0.038	27.101	0.000
Mediation effect				
Jordanian Customs Policy -> SMEs Sustainable Practices -> Supply Chain Performance-SMEs	1.023	0.038	27.101	0.000

Examining the effect of customs policies, and sustainable practices on supply chains success. For instance, H1 predicted that prevailing Jordanian customs regulations would positively influence critical dimensions of supply chain success among SMEs. Results strongly support this hypothesis with a beta of 0.297, t-value of 7.767 and $p < 0.001$ denoting a significant positive relationship between customs policies and supply chain performance. Similarly, H2 stating a positive impact of customs protocols on sustainability adoption is also corroborated with path coefficients ($\beta = 0.854$), t-value (41.801) and p-values below 0.001 representing high statistical significance. This aligns with arguments that custom reforms encourage environmentally conscious practices. Additionally in line with H3, outcomes exhibit that embrace of sustainability practices significantly improve supply chain success as evidenced by β , t and p-value estimates of 1.198, 39.565 and lower than 0.001 respectively. Thus, sustainability initiatives directly enhance performance. Finally, As seen in the above Table, sustainable practices mediated the effect of customs policies on supply chains success in Jordan. This is because the indirect effect as shown above (Jordanian Customs Policy \rightarrow SMEs Sustainable Practices \rightarrow Supply Chain Performance-SMEs) is significant ($\beta = 1.023$, $T = 27.101$, and $P < 0.00$); which indicates that SMEs Sustainable Practices mediate the effect of Jordanian Customs Policy on Supply Chain Performance-SMEs in Jordan. Thus, supporting H4 predictions regarding an indirect effect, sustainability adoption fully mediates the influence of customs legislation on success indicators as shown through highly significant mediating pathway coefficients. Taken together, empirical quantifications affirm the conceptualized foundations regarding leveraging customs and sustainability for boosting Jordanian SME supply chain outcomes.

7. Discussion

This paper addresses the knowledge gap by empirically investigating the influence of prevailing Jordanian customs policies on the supply chain success of Jordanian SMEs across pertinent dimensions like efficiency, flexibility and quality. It also investigates the mediating role of sustainability practices on CSR and environmental practices as future research agendas. This is congruent with H1, which suggests that customs regulations otherwise benefit supply chain success of Jordanian SMEs by Ababneh et al. (December 2023) that good customs administration is pivotal for facilitating trade flows. Find conic inscribed in triangle with minimum arclength Introduction Misconception of the Area Method -- An incorrect proof that can still ferment reasonable conjectures Global properties of octahedral networksConsequence 17A visualization approach to ILP for submodular maximization. Point line counting statistics over arbitrary fieldsDo network frames support community practice. And the supporting of H2 as well corresponds with Alshura et al. (2023) that Custom institutions have sustainable orientations at the heart of their support and governance arrangements. In addition, the results show that this incentivization can lead to increased adoption of conservation practices by those SMEs participating in cross-border trades. Further, H3 (sustainability embraces positive to supply chain measurable) mirrors the findings from Elseoud et al. (2019) in pursuing value creation on three fronts of the economy, society & environment simultaneously. Jordanian SMEs after embracing the ethical principles of environmentally friendly management will have a supply chain that is more resilient, efficient and globally linked. This research also offers empirical support for H4 by proving the indirect mediating effect proposed, and shows how customs reforms, which is part of external forces (Tan et al. 2016), influence sustainability uptake at small firms to drive down supply chain performance downstream. Al-Hyari(2023) pushes into line too and seize configuration means policy tools should cultivate sustainability practices to elicit productivity gains. Furthermore, this paper also attempted to examine the effect of commercial customs on supply chain accomplishment in Jordan and wanted to look over how these government policies link together with equilibrium amongst those operations management concepts associated with source series combined side enterprise operation. Taxes seem to have a positive impact on the supply chains in Jordan (Al-Smadi and Al-Dalayeen,

2019) moreover. This finding echoes the prevailing opinion that efficient provision and operation of supply chains are likely to be promoted by a regulatory system encouraging well-crafted taxation legislation. Similarly, Al-Dalayeen and Al-Shuwaikhat (2021) study the mediating impact of sustainable practices on the link between foreign policies with customs taxes and supply-chain success in Jordan. This supports the idea that sustainable practices serve as a mediator, converting characteristics of customs/tax rule influences on corporate sustainability to real supply chain efficiency increase. Method. The study utilizes quantitative PLS-SEM method with a structured survey instrument for data collection from supply chain professionals in Jordanian SMEs. Nonetheless, this research provides empirical confirmation- at least under some circumstances-of the hypotheses that were envisioned.

8. Conclusion

This paper has focused on the impact of customs regulations and sustainability practices on the success of a supply chain framework set within the strategic context of Jordan. Given the SME-centric structure of Jordanian enterprise, it is validated through the empirical quantifications that longer customs facilitation directly boosts trade flows and consequently supply chain performance among SMEs. Furthermore, in a setup where long customs are naturally incentive-compatible, the incorporation of sustainability incentivizes SMEs to adopt environmentally friendly practices thereby making their supply chains resilient to efficiency and globally integrated. Consequently, the outcomes of the research validate that customs that are supportive of sustainability outcomes are significant in several dimensions of supply chain success among SMEs in Jordan. On a broader view list, the results have implications for both public policy and private sector internationality with customs reform. Nonetheless, the paper has some limitations to pave the way for future research. The current design has focused only on the Jordanian context. As contracts, the research can be extended to testing the overall ability to other developing-country contexts. Another avenue for research is to investigate the dynamics with adjacent policy levers such as taxation – from which point interacts most positively around sustainability. Finally, for future reference, research should spy on actual behaviour in response to customs incentives vaccinated positively towards sustainability. Spanning the manifold areas where customs protocols and sustainability practices fundamentally drive the success of supply chains, one sure future is bright for further scholarly inquiries across various emerging economies.

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