






Financial Sector Performance and Environmental Sustainability: Assessing the Moderating Effect of Social Responsibility

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ABSTRACT

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The study explores the effect of FSEP on Environmental Performance (EPER) in Saudi Arabia's financial sector including a focus on the mediating role of FSSR on EPER. To investigate the hypothesized relationships, we collected primary from 512 employees working in the Saudi financial sector in Alkharj governorate, and SEM was used for hypothesis testing to conclude the results. We find that FSEP enhances both EPER and FSSR and also demonstrates that FSSR positively influences EPER. Furthermore, FSSR plays a significant mediating role as well. Which is strengthening the relationship between FSEP and EPER. These findings conclude the importance of integrating environmentally sustainable financial practices to accelerate economic sustainability and EPER in this sector. We suggest to the Saudi financial sector to further adopt green practices to achieve long-term economic and environmental sustainability in the long run. By reducing energy consumption and mitigating pollution from this sector, the Saudi financial sector can actively contribute to the nation's broader environmental sustainability goals.

1. INTRODUCTION

In today's world, economic growth must be aligned with environmental sustainability, and the financial sector can play a pivotal role in fostering sustainable development without compromising environmental integrity in the long run [1]. Specifically, this sector is urged to adopt environmentally sustainable practices to minimize ecological risks in their operations and decision-making processes, which can foster a clean environment at the country level [2]. FSEP not only support the internal reduction of environmental impact but can also encourage financing for projects that promote sustainability to mitigate Greenhouse Gas (GHG) emissions [3]. By incorporating FSEP, this sector can significantly reduce energy consumption and enhance energy efficiency through sustainable operational measures [4], which can ultimately decrease GHG emissions linked to activities of this sector. Moreover, FSEP can finance environmentally conscious projects, which can also support the development of renewable energy systems or energy-efficient infrastructure leading to the reduction of GHG emissions on a broader economic scale, which is also with national environmental regulations [5].

There are several ways FSEP can foster environmental sustainability. For example, this sector can integrate energy-efficient technologies into their daily operations, which would

reduce energy usage and lower emissions [6]. This sector can also switch from paper-based processes to digital alternatives to mitigate the demand for paper and conserve natural resources, which would otherwise be consumed by the paper industry. In this way, FSEP enhances the concept of EPER to have positive environmental outcomes in this sector. Additionally, the shift towards online services could help reduce not only paper usage [7], but it can also reduce the carbon footprint of customers because of a fewer trip to physical branches, which can also reduce transportation-related emissions in the transport industry. Furthermore, this sector can foster a culture of sustainability by providing educational and training programs to their employees, which would encourage them the adopt green practices in their day-to-day responsibilities [8]. Lastly, this sector can promote finance projects, which could achieve environmental sustainability [9], which would also help create the necessary infrastructure for clean energy and energy-efficient technologies to benefit the economy as a whole.

By adopting sustainable practices, the financial sector can enhance its FSSR as well. For instance, this sector can be achieved by reducing operational costs, expanding the customer base, and increasing profitability through the promotion of green banking as a distinct, which could provide an environmentally friendly alternative to conventional banking practices. For instance, FSEP can facilitate paperless

banking, which can reduce expenses associated with paper and printing. Additionally, the use of energy-efficient technologies in banking operations can mitigate energy consumption, which can cut operational costs as well. Moreover, FSEP has the potential to attract a broader customer base by promoting eco-friendly initiatives to appeal to environmentally conscious consumers [10]. By marketing their commitment to sustainability, this sector can differentiate themselves, which could attract customers to prioritize environmental stewardship. This strategic marketing can enhance customer loyalty and build community trust as well, which would provide green services with a competitive advantage over traditional services [11]. Thus, green services may experience growth in both market share and revenue, which could lead to CSR sustainability. Increasing profits can be reinvested in further FSEP initiatives, which would create a virtuous cycle of further improved EPER and FSSR concepts.

FSSR can act as a positive moderator between FSEP and EPER. For instance, sustainable economic practices would reinforce the environmental gains through green initiatives as well. Hence, we seek to test these hypotheses within the context of the Saudi financial sector. Saudi Arabia is currently undergoing an economic transformation as per Vision 2023 [12], which is aimed at shifting from its reliance on oil to cleaner industries focusing on environmentally sustainable technologies and practices. Investigating the role of the financial sector in this transition is crucial to determining whether it aligns with the country's environmental goals as well. We explore the impact of FSEP on EPER and also the moderating role of FSSR, which is assessed through these practices to influence the relationship between financial activities and economic sustainability.

There is abundant research examining the role of FSEP in improving EPER and its impact on financial performance, stock market stability, and consumer perception [13-15]. These studies have analyzed the effects of FSEP in broader or international contexts, which emphasized green financing, CSR, and policy frameworks. Moreover, Hasan et al. [16] have analyzed this nexus in the case of GCC banks. However, this nexus has not yet been examined in the Saudi financial sector particularly. Besides, the literature suggested examining mediating and moderating factors influencing EPER and FSSR. For instance, green credit, employee behavior, and CSR investments can play crucial roles in determining EPER outcomes [17, 18]. In this context, some studies also found the moderating role of FSSR in the relationship between FSEP and EPER [19]. There is no prior research, which has examined this relationship in the Saudi context. Thus, the present hypothesizes the moderating effect of FSSR in the relationship between FSEP and EPER in the Saudi financial market to bridge the gap in Saudi financial literature. By investigating the effectiveness of green financial initiatives, we aim to demonstrate how the sector can promote a sustainable economy.

2. LITERATURE REVIEW

Figure 1 shows a conceptual framework diagram of the relationship between FSEP, EPER, and FSEP. FSEP could contribute significantly to achieving EPER, which in turn would enhance financial sector competitiveness, stock market performance, and consumer perception. FSEP with caring Corporate Social Responsibility (CSR) can positively

influence consumer behavior and profitability [13]. Khairunnessa et al. [20] scrutinized some banks and highlighted the importance of integrating economic, social, and environmental dimensions into banking operations. They found that practices like offering green loans, promoting paperless banking, implementing environmentally responsible investment policies, and advocating for sustainability in the financial sector are key to achieving environmental sustainability. The authors also stressed the need to increase the responsibility of financial institutions to adopt environmentally friendly practices as part of their operational and policy framework.

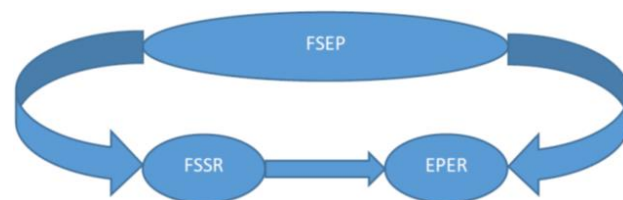


Figure 1. The relationship between FSEP, EPER, and FSEP

Tenuta and Cambrea [21] argued further evidence of the financial benefits of CSR investments, which showed that CSR not only supported environmental goals but also boosted financial performance, which created a dual benefit for banks. Alshebami [22] examined green banking initiatives and found that public sector banks were leading in FSEP adoption, which outperformed other banks in EPER. Their findings emphasized the role of government-backed institutions in driving sustainability in the financial sector, which promoted the overall market as well. Debnath and Roy [6] investigated the role of CSR in banking and found that CSR initiatives positively impact user attitudes. Moreover, the study revealed that functional and sustainability attributes are further enhanced by green e-banking services, which demonstrated that technological integration could magnify the benefits of CSR efforts in banking. Gulzar et al. [14] analyzed the impact of FSEP on EPER and concluded that FSEP significantly supports environmental policies, daily banking operations, and the financing of green projects. Their research underscores how operational practices and policies are promoting environmental efficiency and fostering a culture of sustainable banking.

Gangi et al. [17] explored the moderating role of green credit in the relationship between CSR and FSSR. Their findings revealed that CSR had a dual impact on FSSR, which was negatively affecting it in the short term but contributing positively in the long run as well. Green credit played a mediating role as well, which strengthened this relationship and that was indicating its importance in promoting sustainability through financial mechanisms. Similarly, Dai et al. [18] examined the effects of CSR and green financing on EPER. They found that CSR had a positive impact on EPER. Whereas, green financing also contributed significantly to EPER. Chen et al. [5] further analyzed the impact of FSEP on EPER and showed that FSEP related to employees significantly enhanced green financing. However, customer-focused FSEP did not influence green financing. Additionally, they found that green projects improved EPER, which highlighted the role of employee involvement in driving sustainable banking. Zhang et al. [15] supported these findings by investigating the impact of FSEP on EPER. Their research demonstrated that FSEP improved EPER, with green

financing mediating the relationship and helping reduce carbon footprints. Hasan et al. [16] studied and discovered that EPER positively influenced environmental outcomes. However, it negatively impacted accounting performance, which suggests a trade-off between environmental sustainability and short-term financial gains.

Hossain et al. [23] explored the intersection of sustainability and FSEP and found that economic disclosures were more prominent than environmental ones, which indicated a potential imbalance in the focus on sustainable reporting. Jiakui et al. [24] found a strong positive association between green finance and EPER, which showed that green finance not only improved EPER but also provided essential financial resources for sustainable technologies and practices as well. They emphasized the role of financial innovation in fostering sustainable growth by addressing environmental challenges, which would enhance banks' capacity to support eco-friendly initiatives. Chen et al. [25] investigated the role of banking CSR and found that bank deregulation significantly improved EPER by reducing emission intensity. They highlighted the role of policy reforms in enhancing environmental outcomes within the financial sector. Maama and Appiah [26] explored the influence of stakeholders on EPER and CSR through the mediating role of FSEP and showed that stakeholder pressure significantly improved EPER. Moreover, FSEP mediated this relationship, which emphasized the importance of external pressures in driving sustainable banking practices.

Merab and Irakli [27] examined the effect of green financing on banking environmental friendliness by concluding that environmental strategies and policies had a positive impact on EPER. They suggested that a strong alignment between financial and environmental goals was essential for improving EPER as well. Huang [4] analyzed the performance and reported that commercial banks outperformed government banks in terms of CSR and EPER, which indicated that the private financial sector might be nimbler in adopting environmentally responsible practices. Rubel et al. [28] focused on the impact of green training on bank employees. Their study found that green training positively influenced employee behaviors, which led to enhanced organizational environmental sustainability as well. They suggested that investing in employee education would play a crucial role in the success of FSEP.

Andaleeb et al. [29] analyzed the effect of FSEP on green satisfaction, also including the perceived quality, trust, and environmental friendliness among banking customers in analyses. They found that FSEP positively influenced all these factors, which led to an increase in the customer base for green banks. Aslam and Jawaid [19] investigated the impact of FSEP on banking performance and found that FSEP had a positive effect on both EPER and FSSR. Ghaffar et al. [30] explored the impact of FSEP on EPER. They found that FSEP-enhanced EPER and green finance partially mediated this relationship, which highlighted the role of financing in strengthening the EPER of banks.

Nizam et al. [31] explored the impact of green finance on EPER. They found that green financing significantly improved FSEP. Furthermore, gender diversity played a positive moderating role in the relationship between green finance and EPER, which suggested that diverse leadership would enhance the effectiveness of green finance in promoting EPER. Islam et al. [32] assessed the role of green accounting and found that both green accounting practices and environmental knowledge significantly contributed to the adoption of banking green

accounting. They indicated that these practices improved the financial performance of banks, which was underlining the importance of integrating environmental considerations into financial reporting. Latif et al. [33] investigated the effect of CSR on organizational performance in the Malaysian financial sector and used green innovation as a potential mediator. The study revealed that CSR positively impacted organizational performance. However, green innovation did not mediate this relationship, which suggests that CSR contributed to overall performance. However, its direct link to green innovation might require further investigation.

Choudhury et al. [34] focused on the impact of FSEP on green finance and found that FSEP significantly boosted green financing. It enhanced environmentally friendly banking activities. They also highlighted the role of FSEP in mobilizing financial resources toward sustainable projects as well. Mishra and Sant [35] analyzed the adoption of CSR indicators in the financial sector, which revealed that private banks performed better than government banks in implementing CSR measures. However, the adoption of international standards was low. So, it indicated a need for more global alignment in CSR practices. Khan et al. [36] examined the influence of fintech on EPER and found that fintech significantly enhanced employee efficiency and facilitated green financing technologies. This improvement in efficiency and financing helped to boost EPER, which suggests that technological innovations might play a crucial role in promoting sustainability in banking.

Chen et al. [37] analyzed the performance of financial holdings by focusing on their role in promoting sustainable growth. They found that financial holding banks performed better in terms of operational, market, and sustainable efficiencies, which positioned them as key players in sustainable development. Malik and Singh [38] investigated the role of FSEP in enhancing EPER and FSSR. They found that performance expectancy and social influence played significant roles in enhancing FSEP, so collectivist culture did not moderate the relationship between FSEP and EPER/FSSR, which indicates that cultural factors may not always impact the effectiveness of green practices in certain regions. Kumar et al. [39] analyzed the relationship between FSEP and banking performance and revealed that FSEP positively influenced EPER, and top management commitment moderated this relationship, which suggests that leadership played a critical role in driving successful green initiatives within the financial sector as well.

Giannetti and Ongena [40] examined the link between FSEP and EPER by highlighting the importance of green finance and CSR and demonstrated that FSEP directly impacted both green finance and CSR practices. Thus, it positively influenced EPER. Additionally, green financing and CSR mediated the relationship between FSEP and EPER, which emphasized the interconnectedness of financial and social practices in promoting EPER. Mishra and Rath [41] explored green training and reward systems' contribution to EPER, which underscored the importance of employee engagement in achieving environmental goals. Aliyu et al. [42] investigated the nexus between FSEP, employee green behavior, and EPER by revealing that employee green behavior mediated the relationship between FSEP and EPER. It also contributed to the competitiveness of banks through enhanced EPER, which indicated that employee participation in green initiatives was crucial in transforming banking processes towards sustainable practices and achieving environmental goals as well.

The reviewed literature consistently highlighted the significant role of FSEP in improving EPER. Particularly it stressed the need for the influence of mediating and moderating factors such as green finance, CSR, leadership commitment, and employee behavior. However, this relationship was overlooked in Saudi literature. Thus, we seek to address this by investigating the impact of FSEP on EPER and FSSR in Alkharj within the Saudi financial sector.

3. METHODS

We utilized a questionnaire-based survey to gather primary data from employees in the Alkharj financial market. We select convenience sampling to choose the respondents. This sampling technique is chosen due to the accessibility to respondents and time limitations of the study. Despite its limitations in terms of representativeness and generalizability, we try to ensure a diverse sample to capture a broad range of perspectives within the study's scope within the Alkharj financial market. The questionnaire of the study comprised 18 questions, which were designed to assess three key constructs: FSEP, EPERF, and FSSR. All constructs were measured by

using six items provided in Table 1. The questionnaire was originally distributed in Arabic, which ensured clarity and ease of understanding for Arabic-speaking respondents in Alkharj. It was translated into English for data analysis purposes. Respondents answered all items on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to capture their perceptions of the constructs. A total of 512 valid responses were received and used for further analysis, which ensured robust data to test the research hypotheses.

The responses were recorded in an Excel file and analyzed using STATA 14. The items from the questionnaire were categorized under their respective constructs: FSEP, EPERF, and FSSR. To assess the validity and reliability of the constructs, three key tests were performed: Composite Reliability (CR), Average Variance Extracted (AVE), and Cronbach's Alpha (α). The minimum acceptable values for these tests were 0.7 for CR and α , which indicated adequate internal consistency. 0.5 for AVE measures the amount of variance captured by a construct relative to the variance due to measurement error. After validating the constructs, two models were hypothesized and tested using SEM. The first model tests the direct relationship between FSEP and EPERF, hypothesizing that FSEP improves EPERF:

Table 1. Constructs and items

Construct	Questions
FSEP	Does your institution have formal policies to promote environmentally sustainable practices?
	What is your rating of the institution's commitment to integrating environmental sustainability into financial decision-making?
	Does your institution offer financial products, supporting environmentally friendly projects?
	Does your institution face challenges in expanding green finance initiatives?
	Does your institution follow environmental practices?
	To what extent do stakeholder expectations influence your institution's environmental policies?
EPERF	Does your institution have specific EPER targets?
	How does your institution measure EPER regularly?
	Does your institution follow energy and resource efficiency practices?
	To what extent does your institution prioritize funding in environmentally sustainable projects?
	What level of compliance is your institution with local and international environmental regulations?
	Does your institution face challenges in improving its EPER?
FSSR	Does your institution have a formal CSR framework?
	What is the level of social responsibility initiatives your institution achieves?
	What is the level of engagement of the community to promote social development?
	Does your institution promote employee well-being?
	What is the level of your institution apply ethical financial practices?
	Does your institution face challenges in improving its social responsibility efforts?

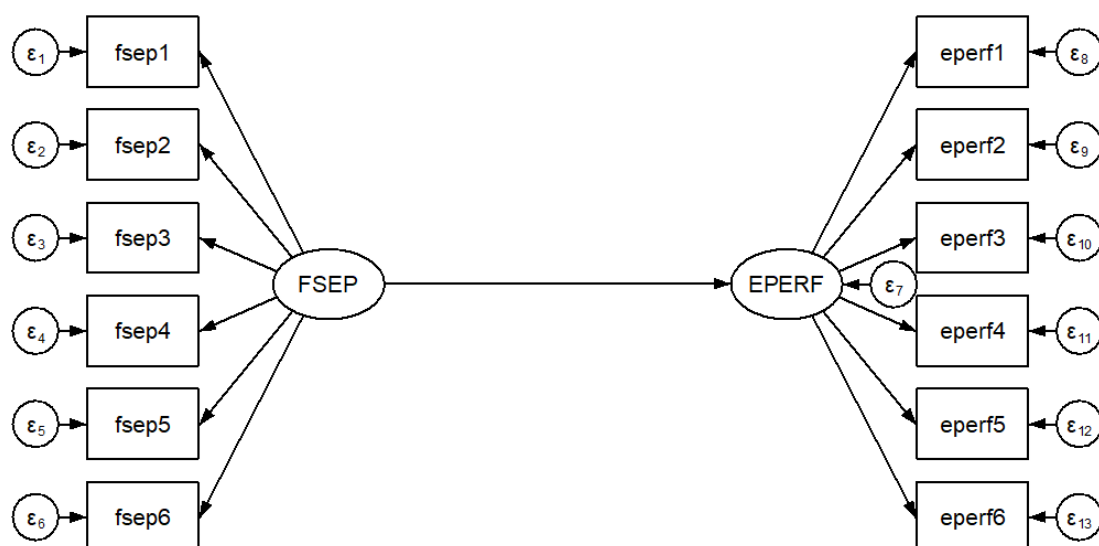


Figure 2. The direct effect of FSEP on EPERF in Model 1

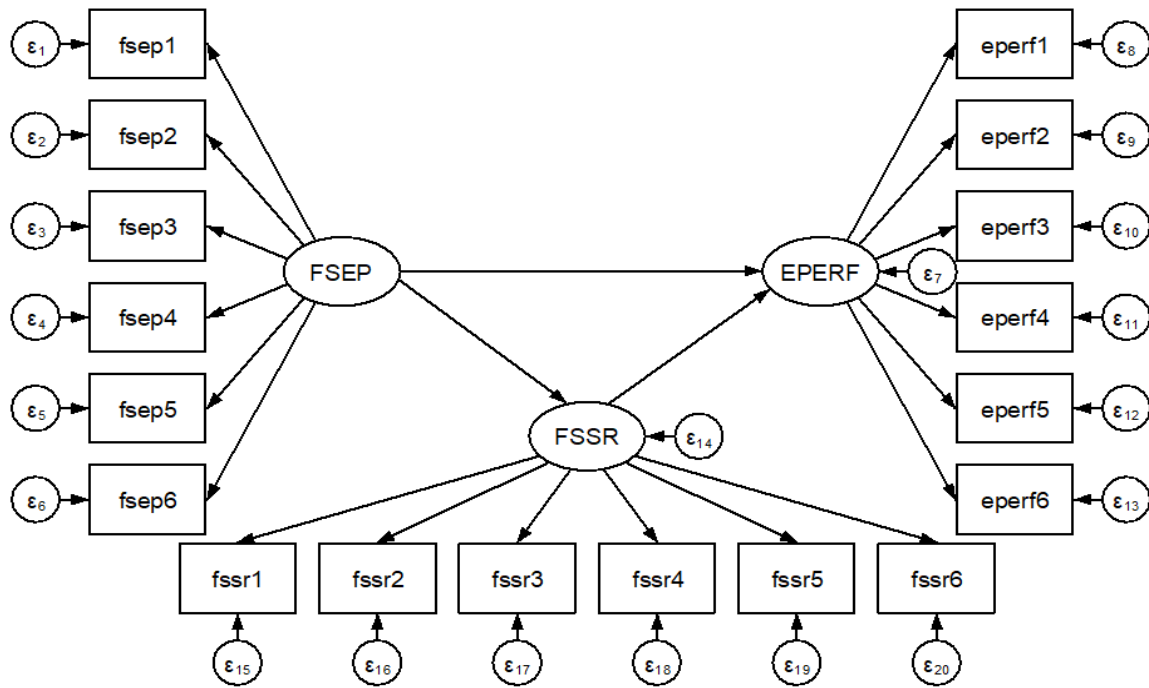


Figure 3. The moderating effect of FSSR on FSEP and EPERF nexus in Model 2

H1: FSEP has a positive impact on EPERF.

The SEM technique was employed to evaluate the structural relationships between the variables, which provided insights into how FSEP directly influences EPERF in the Saudi financial sector. The next steps involved estimating the second hypothesized model, which was considering the mediating role of FSSR.

After analyzing Model 1 (Figure 2), Model 2 posited that FSSR moderated the relationship between FSEP and EPERF (Figure 3). This means that FSEP might influence EPERF. Moreover, it may also affect EPERF indirectly through FSSR. In graphical terms, Model 2 can be represented as follows:

Model 2 posits the following hypotheses:

H2: FSEP improved EPERF.

H3: FSEP enhanced FSSR.

H4: FSSR mediated the relationship between FSEP and EPERF.

After regressing both Model 1 and Model 2 using SEM, the reliability and validity of the results are assessed through the following fit indices: χ^2/df with critical bound (0-3). Lower values indicated a better fit. A value close to 1 might suggest an optimal model fit. CFI with critical bound (0.95-0.97). Values above 0.95 might suggest a good model fit. TLI with critical bound (0.95-0.97). A similar CFI with values above 0.95 might indicate a good fit. RMSEA with critical bound (0.05-0.08) and values below 0.05 might indicate a good fit. However, values up to 0.08 are acceptable. SRMR with critical bound (0.05-0.1) and values below 0.05 might suggest a good fit. However, values up to 0.1 are considered as acceptable. By analyzing these indices, we evaluated the overall goodness of fit for both models and determined the robustness of the hypothesized relationships among FSEP, EPERF, and FSSR. A satisfactory fit across these metrics would support the proposed hypotheses, which could validate the underlying theoretical framework of the study.

4. DATA ANALYSIS

The reliability of the constructs was thoroughly assessed. The results are summarized in Table 2. The CR values for the constructs are FSEP = 0.824, EPERF = 0.789, and FSSR = 0.852. These CR values confirm that all items associated with FSEP, EPERF, and FSSR, which are reliable and consistent with their respective constructs. The Cronbach's Alpha values further substantiated these findings with FSEP = 0.856, EPERF = 0.896, and FSSR = 0.889, which exceed the acceptable threshold of 0.7, which indicates a high level of internal consistency among the items. The AVE values also reflected a strong correlation between the items with FSEP = 0.874, EPERF = 0.864, and FSSR = 0.763. All AVE values are above the 0.5 threshold, which suggests that the items have explained a significant portion of the variance with FSEP = 87.4%, EPERF = 86.4%, and FSSR = 76.3%. Thus, the reliability analyses demonstrate that the items are associated with FSEP, EPERF, and FSSR and effectively represent their respective constructs.

SEM analysis is presented in Table 3, which presents the comprehensive results of the SEM for Model 1. The diagnostic tests confirm that Model 1 exhibits a good fit, which aligns with the critical bounds established by Schermelleh-Engel et al. [43]. The findings substantiated hypothesis H1, which demonstrates a positive impact of FSEP on EPERF. The standardized beta coefficient of 0.874 indicates a positive relationship between FSEP and EPERF, which explains that a one standard deviation increase in FSEP is associated with a 0.874 standard deviation improvement in EPERF. It indicates that the implementation of financial initiatives has effectively enhanced EPER within the Saudi financial sector. FSEP encompasses various eco-friendly initiatives and policies adopted by the financial market. Thus, financial markets have invested significantly in training their staff on sustainable practices, which has equipped them to implement environmentally responsible methods in their daily operations. Moreover, the adoption of energy-efficient equipment and devices has reduced energy consumption and associated GHG

emissions. The shift towards online services has also minimized customer visits and has saved on fuel consumption related to travel. Thus, the Saudi financial sector is actively financing green projects across the economy, which has further contributed to GHG emission reductions. These initiatives collectively illustrated the commitment of the Saudi financial sector to environmental sustainability, which has enhanced its operational practices. The diagnostic tests corroborate that SEM exhibits a good fit to the data. For instance, the χ^2/df is 1.956, which is less than 3 and suggests that the model does not overfit the data. Moreover, the CFI is 0.956, which is greater than 0.95. RMSEA is 0.062, which is less than 0.08. Both fall within their respective thresholds and confirm a model fit. TLI=0.949 is slightly below the recommended range (0.95-0.97). However, this minor deviation does not significantly weaken the overall model validity. Furthermore, the SRMR is 0.087, which is less than 0.1. Overall, these results suggest that the model is well-structured.

Table 2. Reliability tests

Variables	CR	Cronbach α	AVE
FSEP	0.824	0.856	0.874
EPERF	0.789	0.896	0.864
FSSR	0.852	0.889	0.763

Table 3. Model 1 results

Relationship	Parameter	S.E.	z-value	Probability
EPERF<-FSEP	0.874	0.226	3.874	0.000
Diagnostic tests				
χ^2/df	1.956			
CFI	0.956			
TLI	0.949			
RMSEA	0.062			
SRMR	0.087			

Table 4. Model 2 results

Relationship	Parameter	S.E.	z-value	Probability
EPERF<-FSEP	0.563	0.152	3.695	0.000
FSSR<-FSEP	0.632	0.135	4.667	0.000
EPERF<-FSSR	0.524	0.093	5.634	0.000
Diagnostic tests				
χ^2/df	2.452			
CFI	0.949			
TLI	0.989			
RMSEA	0.079			
SRMR	0.062			

Table 4 provides the detailed outcomes of Model 2. The diagnostic tests confirm that Model 2 exhibits a good fit, which indicates the robustness of the model. Moreover, H2 is supported that the positive effect of FSEP on EPERF confirms the implementation of green initiatives effectively enhances EPER in the Saudi financial sector. H3 is also supported by the positive relationship between FSEP and FSSR, which suggests that green practices also contribute to the economic sustainability of the financial sector. The results indicate that the financial sector improves its environmental footprint and aligns with sustainable economic goals. H4 is also validated with the positive effect of FSSR on EPERF, which validates that FSSR positively mediates the relationship between FSEP and EPERF. This implies that the CSR derived from adopting FSEP further improves EPER. The standardized beta

coefficient of 0.563 indicates a moderate positive relationship between FSEP and EPERF, which explains that a one standard deviation increase in FSEP is associated with a 0.563 standard deviation improvement in EPERF. Thus, improving environmental practices within the financial sector would lead to a noticeable improvement in EPER. Moreover, the relationship between FSEP and FSSR is positive with a coefficient value of 0.632, which suggests a strong positive relationship between them. A one standard deviation increase in FSEP might increase FSSR with 0.632 standard deviation points, which indicates that stronger environmental practices in the financial sector are linked to more robust social responsibility initiatives. Lastly, FSSR has a moderate positive relationship with EPERF with a coefficient of 0.524, which indicates that a one standard deviation increase in FSSR results in a 0.524 standard deviation improvement in EPERF. This result exposes that an increase in social responsibility efforts within the financial sector is associated with a moderate improvement in EPER.

The diagnostic tests confirm a good model fit, with χ^2/df = 2.452, which indicates no overfitting. CFI is 0.949, which is approximately equal to the lower critical bound of 0.95. Moreover, RMSEA is 0.079, which is less than 0.08 and supports model validity. TLI=0.989 is slightly exceeding the recommended range, which does not significantly affect the fit. Additionally, SRMR is 0.062, which is below 0.1. Thus, the model is well-structured.

Thus, the results indicate that the Saudi financial sector benefits from a direct enhancement of both EPER and CSR through the adoption of green practices. The findings also highlight the mediating role of FSSR, which suggests that CSR serves as a crucial mechanism by a positive influence of FSEP on EPERF. In H3, FSEP enhances FSSR. The findings underscore several key pathways through which FSEP contributes to economic sustainability in the financial sector. For instance, the transition to paperless processes significantly reduces operational costs. Thus, the financial sector can lower its overall operational expenditures as well. Furthermore, the adoption of energy-efficient technologies leads to substantial savings on energy bills, which further enhances cost and operational efficiency. FSEP facilitates the expansion investments in sustainable projects. This strategy attracts environmentally conscious clients. Thus, the financial sector experience increases business volumes. FSEP creates opportunities for banks to tap into green financing as well. Thus, the financial sector can generate additional revenue while supporting sustainable initiatives and can meet CSR.

By implementing environmentally friendly practices, the financial sector can effectively differentiate itself from competitors in terms of CSR. This differentiation enhances their market positioning and allows them to capture a larger share of the market. The combination of reduced operational costs, increased revenues from a larger customer base, and new income from green financing collectively strengthens the CSR activities in the financial sector. Collectively, FSEP plays a vital role in achieving greater CSR in the financial sector by driving cost efficiencies and enhancing market presence, which fosters a more sustainable financial sector ecosystem. These results underscore the strategic importance of the financial sector in adopting green practices within the financial sector.

In H4, FSSR mediates the relationship between FSEP and EPERF. The findings reveal several crucial insights. For instance, FSSR provides the financial sector with a stable

financial foundation, which enables them to invest in eco-friendly policies. This stability is supported the initiatives such as employee training in sustainable practices and the procurement of energy-efficient technologies. With the backing of FSSR, the financial sector is more equipped to adopt a range of eco-friendly practices. It includes transitioning to paperless operations, promoting online services, and financing environmental projects. Thus, the bank's operational efficiency aligns with broader sustainability goals. FSSR allows banks to invest in eco-friendly equipment and technologies by winning the CSR of the financial sector. This investment helps reduce energy consumption and minimize GHG emissions in financial sector operations.

The mediation of FSSR in the relationship between FSEP and EPERF indicates that financial sustainability is a critical facilitator for the financial sector, which aims at enhancing its EPER. By leveraging financial resources effectively, the financial sector can implement practices, which could reduce their ecological footprint. With a focus on sustainability driven by both FSEP and FSSR, the financial sector is improving its overall operational practices. This is not only improving EPER. But it also boosts the overall reputation of the financial sector in the market, which aligns with the growing consumer demand for sustainable financial sector solutions. The mediation effect of FSSR underscores its importance in enabling the financial sector to pursue FSEP effectively. By ensuring financial stability, FSSR facilitates the adoption of eco-friendly initiatives, which leads to improved EPER and a commitment to sustainability in the financial sector.

5. CONCLUSION

This research demonstrates that FSEP significantly contributes to achieving EPER in the financial sector in Alkharj. Through a well-structured questionnaire administered to 512 employees in the financial sector in Alkharj, the study utilizes SEM to explore the mediating role of FSSR in the relationship between FSEP and EPER. The results confirm that FSEP enhances EPER and FSSR. FSEP enhances EPER primarily through initiatives such as digital banking, green loans, and energy-efficient operations. Thus, the findings indicate that FSEP not only improves EPER but also contributes to the sustainability of the financial sector. FSSR mediates the relationship. Thus, FSSR plays a crucial mediating role, which enhances EPER through its influence on CSR factors. Moreover, FSSR provides the necessary financial resources for banks to implement eco-friendly practices by winning the confidence of the Alkharj community by investing in eco-friendly equipment, reducing energy consumption, and minimizing GHG emissions. FSSR also enables the financial sector to comply with environmental standards by providing training to employees on sustainable practices as well.

We offer some recommendations for the financial sector in Alkharj backed by the results. For instance, the financial sector should prioritize the integration of sustainable practices in their operations. Enhancing employee knowledge and compliance with environmental standards is vital for financial sector EPER. Regular training programs can empower employees to adopt eco-friendly practices effectively, which could help in achieving CSR in the financial sector. Moreover, investing in energy-efficient technologies and equipment can

significantly reduce energy consumption and GHG emissions, which would also increase the application of CSR in the financial sector. Transitioning to paperless services not only conserves resources but also improves operational efficiency in the financial sector. Expanding online financial sector services can further reduce energy consumption associated with traditional ways of services and would limit the environmental impact as well. The financial sector should actively promote its green initiatives to attract environmentally conscious customers, which can enhance its market share relative to competitors and give it a further edge to adopt CSR practices for the sustainable financial sector. By adopting these practices, the financial sector can not only achieve its EPER targets. But it also contributes to broader environmental sustainability goals.

This study provides valuable insights into the relationships between FSEP, FSSR, and EPER. However, the study relies on convenience sampling, which may introduce selection bias and limit the generalizability of findings. Future research may utilize a randomized or stratified sampling approach to enhance the representativeness of the sample. Moreover, this study Saudi financial sector institutions. A future study may expand the study to include different regions or a comparative analysis with other financial markets to enhance its applicability.

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