Artykuły
Articles

PRZESTRZEŃ Społeczna

Social SPACE

Volume 22 Issue 03
2022

The Mediating Role of the Corporate Sustainability Reports (CSR) on the Relationship between the Efficiency Strategy (ES) and Financial Performance (FP) in the Jordanian Financial Sector

Waleed Khaled Younis Rabie

waleedrabi@gmail.com

Ahmed Al-Omush

Accounting Department, Faculty of Economic and Business Administration
The Hashemite University, Zarqa, Jordan. ahmed.omush@hu.edu.jo
College of Business Administration (COBA), American University in the Emirates, Dubai, UAE ahmed.omush@aue.ae.
ORCID ID: http://orcid.org/0000-0003-1601-6798

Prof. Munther Talal Momany

College of Business Administration (COBA), American University in the Emirates, Dubai, UAE
Full Professor in Accounting, munther.momany@aue.ae and drmunther@yahoo.com
ORCID ID: https://orcid.org/0000-0002-8088-4437
Corresponding author

Abstract

This study aims to determine the role of corporate sustainability reports as a moderator in the relationship between efficiency strategy and financial performance in the Jordanian financial sector. To fulfill the research objectives, content analysis was applied to a sample of 170 data from companies listed on the Amman Stock Exchange that represent the financial sector in Jordan. Banks and insurance businesses comprising thirty-four (34) companies were chosen for 2017-2021. The (STATA program version 14) and (PLS) are used during data analysis. The study's findings indicate that Corporate Sustainability Reports significantly mediate the relationship between the Efficiency Strategy and Financial Performance in the Jordanian financial industry. It also demonstrated that Corporate

Sustainability Reports are vital in mediating the relationship between Leverage and Financial Performance in the Jordanian financial industry. This study is significant because it adds new value to research by studying the mediating function of (CSR) in the relationship between (ES) and (FP) in the Jordanian financial industry, as well as the effect of this addition on the advancement of knowledge (FP).

Keywords: Corporate Sustainability Reports, Financial Performance, Efficiency Strategy, Leverage , Jordanian Financial Sector.

1. Introduction

With a cost-benefit analysis, managers can identify the optimal level of corporate sustainability reporting (CSR), avoiding significant expenses that do not create subsequent revenue for the company and consequently have a detrimental impact on performance. Recently, companies have been operating in an environment where accountability is necessary for competitiveness, making corporate social responsibility (CSR) a crucial strategic component (Martínez-Ferrero & Frias-Aceituno, 2015). According to Ur Rehman et al. (2020), corporations should be socially accountable and go beyond maximizing shareholder value. Notwithstanding this, Ong et al. (2019) believe that (CSR) disclosure does not involve deploying expensive resources, which could diminish business profitability.

In a similar vein, Endrikat, Guenther, and Hoppe (2014) investigate, using Meta-Analysis, the effects of environmental disclosure on financial performance and discover that the relationship is extraordinarily robust when the strategic approach underlying corporate environmental performance is proactive as opposed to passive. In addition, they highlighted the plausible effects of methodological conceptions that could explain the relationship between the variables. In the meantime, research in Nigeria analyzes the relationship between social disclosure and firm (FP) (Fijałkowska, Zyznarska-Dworczak, & Garsztka, 2018), with the findings indicating a substantial positive relationship between the variables studied. In addition, corporations that generate higher returns than their total cost of capital produce value for their shareholders. In contrast, firms that earn lower returns than their total cost of capital are considered stockholder destroyers (return on equity).

In addition, businesses define efficiency strategy (ES) as the capacity to maximize output while minimizing inputs (Hanousek, Kočenda, & Shamshur, 2015). In addition, Mitra and Adhikary (2017) discovered that strategic and operational efficiency positively affects (FP) via asset turnover. Yet, some executives do not agree that (CSR) disclosure is essential to guaranteeing their companies' survival in a dynamic, competitive economic climate and informing society, which has the right to be informed about social and environmental impacts (Albatayneh, 2014; Wasara & Ganda, 2019). has highlighted the importance of (CSR) performance to organizations (FP). Yet, little is understood about the role of (CSR) in moderating the link between (ES) and (CSR) (FP). To achieve long-term success in corporate development, businesses must create and implement a pragmatic strategy.

The discourse on the motivation and rationale for incorporating sustainable strategies acts as a preface to the thematic examination of challenges and courses of action in creating and implementing business strategies in pursuit of sustainability. Consequently, the purpose of this study is to examine the mediating effect of (CSR) on the link between (ES) and (FP) in the Jordanian banking industry. The Jordanian financial sector is thriving and essential to economic prosperity. The financial industry contributed around 7.3% of Jordan's gross domestic product (GDP) in 2020. In recent years, Jordanian businesses have shown a growing interest in reporting on corporate sustainability. Jordanian businesses publishing sustainability reports climbed by 30 percent in 2020 compared to the previous year.

According to a survey done by the Arab Monetary Fund in 2020, around 67% of Jordanian financial institutions have developed or are in the process of implementing sustainability policies. Globally, the Global Reporting Initiative (GRI) is the most used reporting framework for sustainability. The GRI framework is also the most popular among enterprises that issue sustainability reports in Jordan. According to studies, there is a positive association between business sustainability performance and financial performance. For instance, a study published in the Journal of Business Ethics in 2020 indicated that organizations with high levels of sustainability performance tend to have higher financial performance than those with low levels of sustainability performance.

This study is divided into five components. The first section is the introduction, the second section gives some related theories and prior research, the third section details Results and findings and methods, the fourth section discusses the results, and the final section ends and makes recommendations.

2. Literature Review

2.1 The Theoretical Background

Stakeholder theory considers both internal and external ties in organizations. It handles all of these relationships that drive the organization's survival, as survival is the essential objective for any business (Donaldson & Preston, 1995). The descriptive stakeholder theory focuses on how a company interacts with various stakeholders. According to instrumental stakeholder theory, a firm can enhance its financial performance over time if it effectively manages its interactions with stakeholders (Ramus, Vaccaro, & Berrone, 2021). Hence, sustainability measures can be driven by self-interest and the desire to increase profit and shareholder value (Beji et al., 2021). With improved sustainability performance, a company may attract additional resources (Wood & Ross, 2006) to expand market opportunities and pricing premiums (Ali, Foroudi, & Palazzo, 2022) as well as recruit more personnel (Turban & Greening, 1997). Hence, controlling stakeholder relations may produce competitive advantages (Asamoah, 2019).

On the other hand, the normative stakeholder theory concentrates on the moral and ethical reasons intended to guide stakeholder-oriented management. Lastly, the instrumental stakeholder theory studied the repercussions, i.e., profit/wealth-enhancing opportunities, of incorporating diverse stakeholders into business strategy. Thus, the latter is the most pertinent for investigating and explaining the relationship between CSP and financial performance.

2.2 Principles of Corporate Sustainability Reports

Corporate sustainability reports are based on the fundamental concepts of environmental, social, and economic responsibility. They comprise three primary principles that largely depend on organizational practices and structures (Purvis, Mao, & Robinson, 2019). The Ecological Integrity Principle refers to the company's duty and directive to reduce its harmful effects on ecosystems. This can be accomplished by minimizing energy use, recycling, and minimizing pollution. In addition, there are incentives for residential and commercial use of renewable energy sources.

Social Equality Principle is the awareness of the laws contributing to maintaining health and preventing pollution from factories and businesses' damaging operations. In industrialized nations such as North America and Europe, rigorous inspection procedures are in place to verify that businesses and individuals comply with the law, preserve the health and well-being of the populace and sustain these benefits. Thus, there is an immediate need to educate and motivate people to engage in environmental sustainability reports, as well as to raise awareness of the impacts of maintaining and protecting the environment and to warn of potential threats (Ye et al., 2020).

The third pillar is the Economic Prosperity Principle, regarded as one of the most important measures of sustainable development due to its significance in commerce, companies, employment, and job creation. In addition, this entails providing firms and other organizations with incentives to comply with sustainability criteria in addition to statutory and regulatory requirements. In addition, it is required to encourage, strengthen, and raise incentives for individuals to carry out their responsibilities and attain these objectives, as well as to limit the negative repercussions of what an individual does, what affects him, and what has an adverse influence on the environment. Moreover, the market's supply and demand are consumerist, as modern life requires a lot of resources daily. To protect the environment, it is vital to regulate consumption. Economic development is related to giving people what they want without negatively impacting their quality of life, particularly in developing nations, and the necessity to lessen financial burdens when doing the right things (White, Habib, & Hardisty, 2019).

2.2.1 Elements of corporate sustainability reports

Sustainable development where Firms'strategy must be based on environmental and social responsibility and not only on commercial objectives because the current era has contributed to the availability of two crucial aspects for the sustainability reports of organizations: Initially, it assisted in delivering environmental, social, and economic assessments for decision-making purposes. Second, establishing a common plan for achieving social, environmental, and economic sustainability by businesses, governments, and individuals is reported (Wilson, 2003). Corporate Social Responsibility stresses the importance of implementing sustainable development trends (Heinberg et al., 2021).

2.3: Efficiency Strategy

A person's competencies are a collection of knowledge, skills, and talents that differ from person to person. Knowledge was emphasized as a component of competence. Competence is vital to an organization's intellectual capital (Gottschalk, 2005).

2.3.1 Components of Efficiency Strategy

Efficiency consists of essential aspects, some acquired and others congenital. Still, in the management field, we are interested in a set of competence since human competence varies depending on the application. The most crucial strategic competencies are expertise, preparedness, accomplishment, and behavior. (Wagner, 2019)

2.4: Financial performance

The degree to which an organization may achieve its growth, continuity, and profitability objectives, hence maximizing the owner's wealth, through the optimal use of available economic resources within the strategic decisions made by its executive departments (Kyere & Ausloos, 2021). In this study, the ratios of the return on investment and return on equity were used to measure it.

2.5 Literature Review and Hypothesis development

Research on the monitoring of (CSR) in general concentrates on the performance and value of the company. In addition, when relevant prior research is investigated, it confirms the accuracy of the authors' choice of this research issue, even if there are insufficient worldwide studies. Include the following prior studies pertinent to the subject of the study:

2.5.1: The Relationship between the Efficiency Strategy and (CSR)

According to Ghardallou and Alessa’s (2022) study of 34 Saudi enterprises from 2015 to 2020, there is a positive correlation between (ES) and organizational performance (CSR). In addition, Al-Wattar, Almagtome, and Al-Shafeay (2019) concluded that organizations applying (ES) via available resources and organizational culture positively affected sustainability reports. Andania and Yadnya (2020) employed a quantitative research methodology in their study. From 2014 to 2018, they gathered information on the disclosure of the sustainability report and financial performance of 27 banking companies on the Indonesia Stock Exchange. The study relied on secondary data collected from banking institutions' annual reports, sustainability reports, and financial reports. The mean, standard deviation, minimum, and maximum values for each variable were determined using descriptive statistical analysis. Then, a regression analysis was performed to investigate the association between sustainability report disclosure and financial performance. Regression using Ordinary Least Squares (OLS) was employed for analysis. The significance of the coefficients was evaluated using t-tests, and the model's fit was assessed using the R-squared value after adjustment. They claimed that the efficiency of performance through the organization's decision-making structure assists in providing a clearer image of decision-making to (CSR).

According to Ukko et al. (2019), strategic competence plays a significant part in sustainable growth; therefore, business operations that suit the organization's and its stakeholders' needs must be presented and emphasized. Ukko et al. (2019) examined the sustainability practices of Finnish SMEs using a mixed-methods methodology. The authors performed a quantitative survey of 1,000 randomly chosen Finnish SMEs to collect information on their sustainability strategies. Environmental, social, and economic sustainability practices were covered in the study.

In addition to the survey, the authors conducted qualitative interviews with fifteen small and medium-sized enterprises (SMEs) to acquire a more profound knowledge of their sustainability practices and to investigate the variables that assist or impede the implementation of such practices. The interviews were transcribed and subjected to content analysis to discover themes associated with adopting sustainable measures. Ukko et al. (2019) analyzed the sustainability practices of Finnish SMEs using a mixed-methods approach incorporating quantitative and qualitative data.

In addition, the study by Freeman, Dmytriyev, and Phillips (2021) indicates that (ES) examines future environmental, social, and economic sustainability reports and ecologically friendly production procedures. So, the following hypothesis was proposed:

$\boldsymbol{H_1}$: *There is a significant positive relationship at* $(a \leq 5\%)$ *between (ES) and (CSR)*

2.5.2: The Relationship between Leverage and (CSR)

Yi and Yu (2010) analyzed Hong Kong's sustainability reports. According to his findings, financial leverage has a favorable effect on (CSR). In addition, Castelo Branco et al. (2014) analyzed the association between corporate sustainability performance and corporate financial performance through a systematic literature analysis. The authors searched several databases, analyzed essential papers, and applied inclusion and exclusion criteria to locate relevant studies.

Castelo Branco et al. (2014) performed a meta-analysis to summarize the results of the included studies as part of their data analysis. They did a statistical analysis to determine the magnitude of the overall association between business sustainability performance and corporate financial success and to find potential moderators of this relationship. The authors also ran a sensitivity analysis to check the validity of their findings and the possible influence of publication bias on the results. The results demonstrated that the degree of financial leverage substantially impacted the sustainability reports.

In the same context, Onoja, Okoye, and Nwoye (2021) discovered that corporate size had a substantial positive link with the disclosure of sustainability reports. In contrast, leverage had a significant negative influence on sustainability reports. Similarly, Nair and Bhattacharyya (2019) findings indicate that businesses operating in sensitive and less leveraged industries are likely to outperform in their sustainability reports.

In addition, Bhatia and Tuli (2017) employed leverage as an explanatory variable. The results demonstrated that organizations with a high level of leverage have an increased risk, contributing to producing more sustainability reports. Several academics have underlined that strategic financial and commercial operations must be included in sustainability reports (Engert & Baumgartner, 2016; Lamboglia et al., 2018). So, the following hypothesis was proposed:

$\boldsymbol{H_2}$ *There is a significant positive relationship at (a ≤ 5%) between leverage and (CSR).*

2.5.3: The Relationship between (CSR) and Financial Performance

Andania and Yadnya (2020) employed a quantitative research methodology in their study named "The Impact of Sustainability Report Disclosure on Banking Firm Financial Performance in Indonesia Stock Exchange" to examine the relationship between CRS and FP. They gathered information from the annual reports of 33 banks listed on the Indonesia Stock Exchange (IDX) between 2014 and 2018.

They utilized multiple regression analysis to test their research hypothesis. The dependent variables were Return on Assets (ROA) and Return on Equity (ROE), whereas the independent variable was sustainability report disclosure (SRD). In addition, their model contained control factors like size, leverage, and liquidity to account for their possible implications on financial performance.

The authors analyzed their data with the help of the SPSS software tool. To test their hypotheses and assess the association between SRD and the financial performance of banks, they did descriptive statistics, correlation analysis, and regression analysis. They also utilized the Durbin-Watson test to check for autocorrelation in their model's residuals. They found that the revelation of (FP) affects (FP) (CSR). In addition, Zyadat (2017) found that to improve (FP), we must generate (CSR) to determine whether the aims and activities are aligned with the goals. Pham et al. (2021) showed that (CSR) and had a positive correlation (FP).

Few sustainability reports have been entirely abandoned due to the fear of accounting department overstaffing, as shown by Adams and Larrinaga (2019), who have presented several issues relating to organizations' dealings with sustainability reports. They shed light on the need to do additional research on accounting systems connected to sustainability reports to integrate systems and facilitate submitting and releasing reports to users. So, the following hypothesis was proposed:

H_3: *There is a significant positive relationship at ($a \leq 5\%$) between (CSR) and (FP).*

2.5.4: The Relationship between the Efficiency Strategy and Financial Performance

Through asset turnover, Mitra and Adhikary (2017) found that strategic and operational efficiency favorably impacted financial performance. Likewise, Peng et al. (2020) demonstrated that the relationship between strategic efficiency and the company's profitability is positive. In addition, to achieve strategic efficiencies, it is necessary to eliminate waste, redundancy, labor utilization, innovation, and business processes (Vangie, 2019). In light of the preceding debate and the findings of Keramidou et al. (2013), who found a weak positive correlation between efficiency and profitability, we propose the following. The fourth theory suggested:

$\boldsymbol{H_4}$: There is a significant positive relationship at ($\alpha \leq 5\%$) between (ES) and (FP).

2.5.5 *The Relationship between leverage and financial performance*

Financial ratios serve a vital role in measuring financial performance. Dimisyqiyani, Suhadak, and Kertahadi (2015) did a quantitative study to analyze the relationship between environmental performance and the financial success of Indonesian mining businesses. The study selected 13 mining companies listed on the Indonesia Stock Exchange that submitted sustainability reports between 2013 and 2015 using a purposive sample strategy. In addition, the study gathered information from the chosen companies' annual reports and sustainability reports. Financial performance measures (ROA, ROE, and Tobin's Q) and environmental performance indicators (emissions, energy, water, and waste) are among the data collected.

Multiple regression analysis was performed to evaluate the premise that environmental performance positively impacts financial performance. The utilized regression model is as follows:

$Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \varepsilon$

Y represents financial performance indicators, X1 represents emissions, X2 represents energy, X3 represents water, X4 represents waste, and ε represents error term. The study also included control variables such as company size, leverage, and industry type in the regression model to control for their effects on the relationship between environmental and financial performance.

The relationship between environmental and financial performance was analyzed quantitatively using multiple regression analysis and SPSS software. The results of the Dimisyqiyani et al. (2015)'s study indicate a positive impact of financial leverage on the (FP) measured through the return on equity, earnings per share, and market risks, while there was no effect of financial leverage on the (FP) itself. On the other hand, there was a negative impact of financial leverage measured through the debt ratio on the (FP) measured through the return on equity, and a positive effect of financial leverage measured through the debt ratio on the (FP) measured through

Thus, the hypothesis was proposed:

$\boldsymbol{H_5}$: *There is a significant positive relationship at (a ≤ 5%) between leverage and (FP).*

2.5.6 The Mediating Role of (CSR) in the Relationship between Efficiency Strategy on Financial Performance

Several studies assert that financial performance determines the CSR's credibility. Reddy and Gordon (2010) analyzed 17 New Zealand-listed firms and found a favorable correlation between corporate social responsibility (CSR) and financial performance (FP). In the same vein, the findings of Goyal, Rahman, and Kazmi (2013) indicate that (ES) contributes to the improvement of (FP) by reducing costs and attaining specified goals without compromising system outputs and by facilitating the effective execution of administrative chores.

Moreover, another study reveals a positive correlation between CSR and ES (Horváth, 2017). According to Swarnapali and Le (2018), the association between sustainability reports and the market value of a company is favorable due to the dedication of investors to environmental and social responsibility. In the same context, Liang, Tu, and Zheng (2019) reported that (ES) creates a competitive advantage for the firm by completing projects and achieving strategic objectives.

Accordingly, Al Matarneh (2019) investigated the impact of the disclosure of sustainability reports operations on the (FP) of 13 listed mining companies in the Amman Stock Exchange market (ASE) for the period 2012-2015. Using descriptive analysis, he discovered a weakness in the level of disclosure for some companies, particularly in the environmental and social dimensions. The (FP) of companies was affected by the level of disclosure of the various dimensions of sustainability reports. In addition, the study advised that firms submit sustainability reports to a broader audience that is not limited to a single stakeholder group. So, the following hypotheses were proposed:

H_6*: *There is a positive significant mediating role of (CSR) at (a ≤ 5%) in the relationship between (ES) on (FP).

2.5.7 The Mediating Role of (CSR) in the Relationship between Leverage on Financial Performance

Investment in research and development, which includes creating original and innovative goods with market benefits, demonstrates the sustainability reports of firms (Yang & Lai, 2021). According to Yang and Lai (2021), financial leverage impacts investments in research and development firms. The results demonstrated that organizations should utilize financial leverage in supporting research and development to stimulate and execute environmental sustainability (ES) within the organization, which significantly contributes to the sustainability reports of organizations.

Similarly, Oncioiu et al. (2020) examined the association between corporate social responsibility and financial performance in Romanian businesses. The results demonstrated that corporate social responsibility (CSR) creates new opportunities to improve management practices and increase companies' financial performance (FP) regardless of their size and assists stakeholders and management in making decisions regarding environmental regulations. It was also shown that the favorable connections between the levels of (CSR) and (FP) results inspire firms to participate in CSR activities and report on them transparently. Thus, the proposed hypothesis.

H_7*: *There is a positive significant mediating role of (CSR) at (a ≤ 5%) in the Relationship between Leverage on (FP)

2.6: What distinguishes this study from previous studies?

Hence, this study investigates the impact of financial leverage on (FP) for Jordanian firms listed on ASE. This work is distinguished by its originality by referencing heated debates and earlier studies. In contrast to Al-Mohareb and Alkhalaileh (2019) and Zyadat (2017), the most recent study that investigates the Jordanian case, the current study measured the mediating role of (CSR) on the relationship between (ES) and financial performance. In contrast, Zyadat (2017) sequentially investigated the impact of sustainability report and financial leverage on financial performance.

3. Research Methodology

In this study, a quantitative approach was utilized, which is described as a collection of physical theories that examine social phenomena using hypotheses and numbers and interpret the results numerically (Ahmad et al., 2019).

3.1 Study Population and Sample

The study adopted twenty-one criteria from prior research. In addition, the study population and sample comprise the Jordanian financial industry, subdivided into two sectors listed on the Amman Stock Exchange: the banking sector, which consists of (15) commercial banks, and the insurance sector, which consists of (19) enterprises. From this perspective, the researcher deemed it necessary to identify the factors that influence the financial performance of Jordanian financial companies and to conduct a study to determine the level of disclosure of their community service activities by joint stock companies listed on the Amman Stock Exchange. Therefore, all Jordanian financial sector enterprises' 2017-2021 financial reports were collected.

3.2 Data Collection Method

This study uses content analysis methodology because it is primarily quantitative. The quantitative analysis method is utilized for various objectives, including a Quantitative description of the examined phenomenon: the research aims to describe the selected unit of analysis through iterative monitoring. This study aimed to compare the frequency of one phenomenon with that of another. This methodology should be used to assess the Amman Stock Exchange's financial accounts.

3.3 Research Model

To meet the purpose of the study and its specific objectives, a research model was established based on prior research (Alshehhi, Nobanee, & Khare, 2018; Ghenimi, Chaibi, & Omri, 2017; Hanousek et al., 2015), and Figure 1 depicts the correlations between these variables.

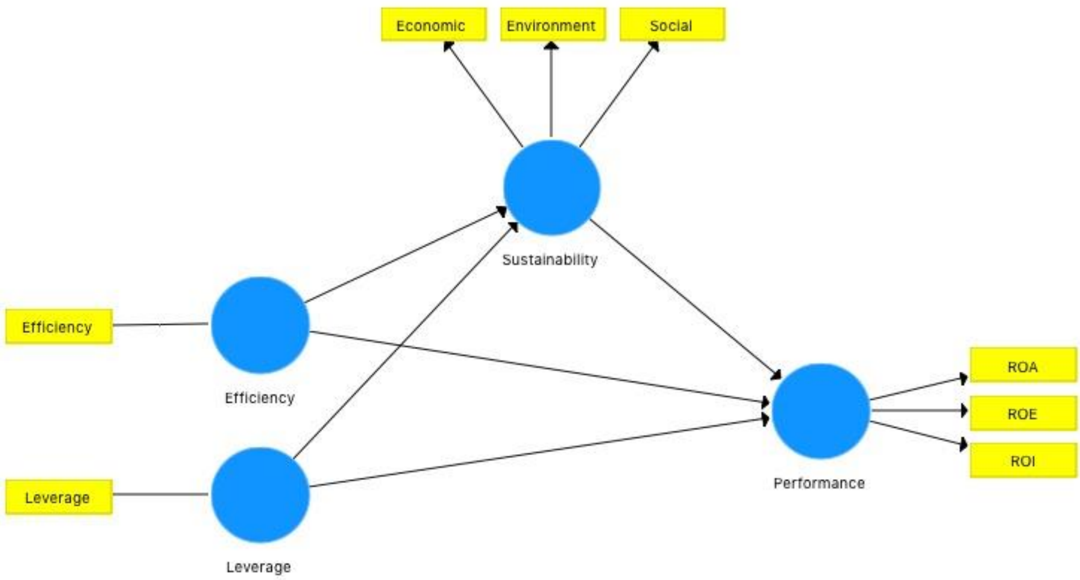

Figure 1, Research Model

3.4 Variable Measurement

3.4.1 Reports on Sustainability

In this study, (CSR) was quantified by assessing the content of business financial statements and applying the parameters of sustainability reports, which are divided into three categories: economics, environment, and society (Alshehhi et al., 2018). These categories were used to determine the extent to which the aspects of sustainability reports in companies apply to the Jordanian financial sector (Landrum & Ohsowski, 2018), and the performance of companies sustainability reports was measured along two dimensions: the social performance of companies and the environmental performance of companies (Albatayneh, 2014). In addition, (CSR) relates to the terms corporate responsibility (CSR), environmental management, and sustainable development, demonstrating a triple baseline (Landrum & Ohsowski, 2018). According to Landrum (2018) study, sustainability reports fall into two categories: 1- GRI-compliant reports, a total of two non-GRI non-standard reports. According to studies Calace (2016) and Ernst and Young (2016), businesses prioritize the GRI indicator.

Table 1: Sustainability Index:

Economic Aspects
• Economic performance • Indirect economic effects • Competitive presence in the market • Purchasing practices
Environmental Aspects
• Materials • Water • Emissions • liquid and solid waste • Products and Services • Supplier Environmental Assessment • Environmental Complaints Mechanisms
Societal Aspects
• Recruitment • Employment/Management Relationship • Occupational Health and Safety • Training and Education • Diversity and equal opportunity • Supplier evaluation of human rights • Complaints mechanisms related to the effects on society. • Customer health and safety • Labeling information on products and services • Customer Privacy

Source: Calace (2016) and Ernst and Young (2016)

3.4.2 Financial Performance

All variables in this consist are secondary collected from the annual reports of banks and financial institutions, where the measurements of the corporate financial performance (FP) return on investment (ROI), return on asset (ROA), and return on equity (ROE) (sales growth and profit growth) (Albatayneh, 2014) and measured using the following formula:

1. $ROA = \frac{Net\ Profit}{Total\ Asset}$ (Dirman, 2020)
2. $ROE = \frac{Net\ income\ after\ tax}{Shareholder\ Equity}$ (Munangi & Bongani, 2020)

3. $ROI = \frac{Final\ value\ of\ investment - Initial\ cost\ of\ investment}{Intial\ cost\ of\ investment\ X\ 100}$

4. $Efficiency = \frac{Operating\ expense}{Operating\ Income}$ (Ghenimi et al., 2017; Koju, Koju, & Wang, 2018)

5. $Leverage = \frac{BV\ of\ debt}{Total\ asset}$ (Jihadi et al., 2021; Yang & Lai, 2021)

4. Results and Findings of the Study

This section provides descriptive statistics for the variables in the study. It analyzes the role of (CSR) as a mediator in the link between (ES) and (FP) in the Jordanian financial sector and shows the path analysis results using Smart PLS 3.3. Smart PLS 3.3 provides an intuitive graphical user interface for PLS-SEM analysis. It enables researchers to develop measurement and structural models, conduct investigations, and generate findings, visualizations and reports. The software also contains a variety of sophisticated capabilities, including multi-group analysis, mediation and moderation testing, and bootstrapping for evaluating model fit and significance.

EViews 10 was utilized for descriptive, heteroscedasticity, autocorrelation, and unit root analysis. This section's primary objective is to test the study's hypotheses and answer its questions.

4.1: Descriptive Statistics

The following Table displays the descriptive statistics of the dependent, mediator, and independent variables for the sample of 170 firm-year observations that were winsorized by the EViews 9.5 program. The winsorized mean was utilized to restrict the effect of outliers or abnormally high values.

Table 2: Descriptive Statistics of Dependent and Explanatory Variables

Variables	Mean	Median	Maximum	Minimum	Std. Dev.
ROA	0.01	0.01	0.09	-0.18	0.03
ROE	0.05	0.07	0.32	-0.62	0.10
ROI	-0.13	-0.19	1.57	-0.73	0.42
EFF	2.12	3.23	135.82	-1001.52	82.07
LEV	0.74	0.77	0.93	0.35	0.15
SOC	0.39	0.38	0.92	0.08	0.16
ENV	0.37	0.25	1.00	0.13	0.23
ECO	0.59	0.50	1.00	0.25	0.21

As shown in Table 2, the dependent variable return on assets ROA has a mean of (0.01), a standard deviation of (0.0.03), a median value of (0.01), a minimum value of (-0.18), and a maximum value of (0.09), indicating that financial sector firms generate an average return of 1% for every 1JD invested in their assets. As for the dependent variable return on equity ROE, the mean is (0.05), the standard deviation is (0.10), and the median, minimum, and maximum values are (0.07), (-0.62), and (0.32), respectively, indicating that financial sector companies generate an average return of 5% for every 1JD invested in their shares.

As for the dependent variable return on investments ROI, the mean is (-0.13), the standard deviation is (0.42), the median is (-0.19), the minimum value is (-0.73), and the maximum value is (1.57), indicating that financial sector enterprises create an average of 1% return for every 1JD invested. As for the efficiency of the independent variable, EFF has a mean of (2.12), a standard deviation of (82.07), a median value of (3.23), a minimum value of (-1001.52), and a maximum value of (135.82), indicating that, on average, the operating expenses of financial sector enterprises exceed their operational profit by close to twofold.

As for the independent variable leverage LEV, it has a mean of (0.74), a standard deviation of (0.15), a median value of (0.77), a minimum value of (0.35), and a maximum value of (0.93), indicating that, on average, financial sector companies rely on debt to finance their capital structure, with only a quarter of their capital structure financed by shares. As for the mediator, the social SOC variable has a mean of (0.39), a standard deviation of (0.16), a median value of (0.38), a minimum value of (0.08), and a maximum value of (0.92), indicating that financial sector enterprises disclose on average of 39% of their social sustainability activities.

As for the mediator, the variable environment ENV has a mean of (0.37), a standard deviation of (0.23), a median value of (0.25), a minimum value of (0.13), and a maximum value of (1.00), indicating that financial sector firms disclose an average of 37% of their environmental sustainability practices. As for the mediator variable economic ECO, the mean is (0.59), the standard deviation is

(0.21), and the median, minimum, and maximum values are (0.50), 0.25, and 1.00, respectively, indicating that on average, financial sector firms disclose 59% of their economic sustainability practices.

4.2: Hypotheses Testing

4.2.1: Measurement model

The initial measurement model is displayed below. Figure 2 shows the outer loading of all variables in the model. In addition, the external loading of the beginning variables is communicated in Table 4.8; the factor loadings of all variables are examined to eliminate those with low factor loadings. Blanco et al. (2023) propose employing a cutoff of 0.4 for interpretative purposes, regardless of sample size. As demonstrated in Table 1, Shrestha (2021) argues that all components in a factor model should have commonalities of over 0.60 or an average communality of 0.70 to justify factor analysis with small sample numbers (4.7). In this study, the researcher followed Tabachnick and Fidell (2007) recommendation that factor loading should be adjusted based on sample size:

Table 8: Minimum factor loading required (Tabachnick & Fidell, 2007)

Factor loading	The sample size needed for significant
0.3	350
0.35	250
0.4	200
0.45	150
0.50	120
0.55	100
0.60	85
0.65	70
0.70	60
0.75	60

This study's final observations were 170; accordingly, the most appropriate cut-off factor loading is 0.45. Figure 2 shows the measurement model of the survey, R^2 and the factor loading of the items.

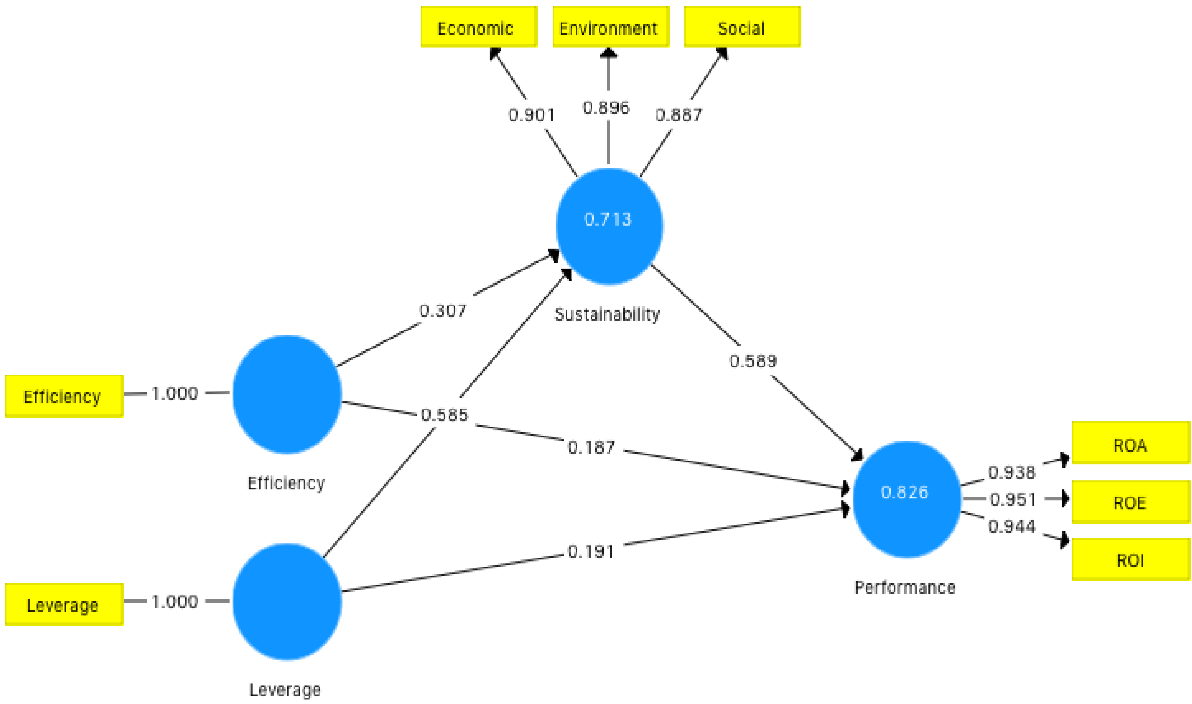

Figure 2: Measurement Model of the Study Variables

To better display the factors loadings, they have been formulated in Table (4.8)

Table 9: Outer Loading of Study Variables

SECTION	#	Financial Performance	Corporate Sustainability	Efficiency	Leverage
Financial Performance	ROA	0.938	0.861	0.760	0.781
	ROE	0.951	0.834	0.731	0.781
	ROI	0.944	0.821	0.720	0.758
Corporate Sustainability	Economic	0.777	0.901	0.713	0.762
	Environment	0.800	0.896	0.630	0.716
	Social	0.807	0.887	0.688	0.725
Efficiency	Efficiency	0.780	0.757	1.000	0.770
Leverage	Leverage	0.819	0.821	0.770	1.000

Table 9 shows that each variable belongs to its latent and is highly correlated, which means there are no cross-loading problems between variables.

4.2.2: Structural model

The objective of the structural model is to explore the mediating effect of (CSR) on the link between (ES) and (FP) in the Jordanian financial sector using the bootstrapping technique of Falk et al. (2023). Figure 3 depicts the structural model of the results.

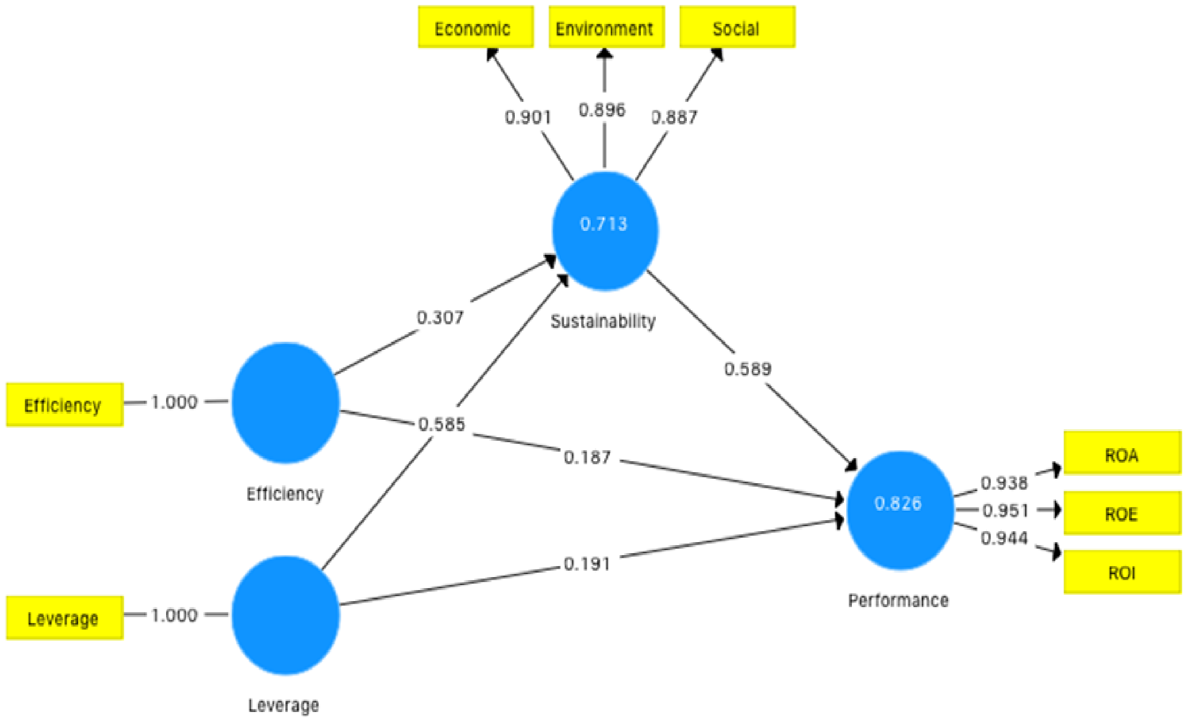

Figure 3: Bootstrapping and Hypotheses Testing

According to the study model, both Efficiency and Leverage R2 = 0.713, which indicates that both **Efficiency** and Leverage explain 71.3% of the change in corporate sustainability reports. In contrast, the mediation role of corporate sustainability reports on the impact of Efficiency and Leverage on Financial Performance R^2 = 0.826, which indicates that both Efficiency and Leverage mediated by corporate sustainability reports explain 82.6% of the change in Financial Performance (FP).

To test the study hypotheses, the bootstrapping technique was used in the Smart PLS 3.3 Software, the result of **Path A** (Efficiency and Leverage ≥ Sustainability), **Path B** (Sustainability ≥ Performance), **Path C** (Efficiency and Leverage ≥ Performance) and **Path C'** (Efficiency and Leverage ≥ Sustainability ≥ Performance) hypotheses testing is shown in Table 10 as follow:

The results of path A in Table 10 show that:

1. Efficiency ≥ Sustainability has a (β = 0.307, p = 0.001), which means there is a positive and significant impact of (ES) on (CSR) in the Jordanian financial sector; accordingly, the first alternative hypotheses are accepted, which states that There is a statistically significant relationship at (α ≤ 5%) level of significance between Efficiency Strategy on Corporate Sustainability Reports in the Jordanian financial sector.
2. Leverage ≥ Sustainability has a (β = 0.585, p = 0.000), which means there is a positive and significant impact of leverage on (CSR) in the Jordanian financial sector; accordingly, the second alternative hypothesis is accepted, which states that there is a statistical relationship at (α ≤ 5%) level of significance between Leverage on Corporate Sustainability Reports in the Jordanian financial sector.

Table 10: Path A, B, C and C' Hypotheses Testing

Path	H#	Relationship	Path Coefficient	T-Statistics	P Values
A	H1	Efficiency ≥ Sustainability	0.307	3.322	**0.001**
A	H2	Leverage ≥ Sustainability	0.585	6.464	**0.000**
B	H3	Sustainability ≥ Performance	0.589	7.334	**0.000**
C	H4	Efficiency ≥ Performance	0.187	2.110	**0.035**
C	H5	Leverage ≥ Performance	0.191	2.393	**0.017**
C'	H6	Efficiency ≥ Sustainability ≥ Performance	0.181	3.007	**0.003**
C'	H7	Leverage ≥ Sustainability ≥ Performance	0.345	4.786	**0.000**

The results of path B in Table (10) show that:

3. Sustainability ≥ Performance has a (β = 0.589, p = 0.000), which means there is a positive and significant impact of (CSR) on (FP) in the Jordanian financial sector; accordingly, the third alternative hypothesis is accepted which states that There is a statistically significant relationship at (α ≤ 5%) level of between Corporate Sustainability Reports on Financial Performance in the Jordanian financial sector.

The results of path C in Table (10) show that:

4. Efficiency ≥ Performance has a ($\beta = 0.187$, $p = 0.035$), which means there is a positive and significant impact of (ES) on (FP) in the Jordanian financial sector; accordingly, the fourth alternative hypothesis is accepted, which states that There is a statistically significant relationship at ($\alpha \leq 5\%$) level of between Efficiency Strategy on Financial Performance in the Jordanian financial sector.

5. Leverage ≥ Performance has a ($\beta = 0.191$, $p = 0.000$), which means there is a positive and significant impact of leverage on (FP) in the Jordanian financial sector; accordingly, the fifth alternative hypothesis is accepted, which states that There is a statistically significant relationship at ($\alpha \leq 5\%$) level of between Leverage on Financial Performance in the Jordanian financial sector.

The results of path C' in Table (10) shows that:

6. Efficiency ≥ Sustainability ≥ Performance have a ($\beta = 0.181$, $p = 0.003$), which means that (CSR) positively and significantly mediates the impact of (ES) on (FP) in the Jordanian financial sector; accordingly, the sixth alternative hypothesis is accepted which states that there is a statistically significant mediation role at ($\alpha \leq 5\%$) level of Corporate Sustainability Reports in the relationship between Efficiency Strategy on Financial Performance in the Jordanian financial sector.

7. Leverage ≥ Sustainability ≥ Performance has a ($\beta = 0.345$, $p = 0.000$), which means that (CSR) positively and significantly mediates the impact of leverage on (FP) in the Jordanian financial sector; accordingly, the seventh alternative hypothesis is accepted, which states that There is a statistically significant mediation role at ($\alpha \leq 5\%$) level of Corporate Sustainability Reports in the relationship between Leverage on Financial Performance in the Jordanian financial sector.

5: Discussion

R1: The Jordanian financial sector's efficiency Strategy and Corporate Sustainability Reports are statistically significant at 5%.

This study examines the connection between (ES) and (CSR). Reports on efficiency strategies correlate positively with (CSR). Disclosure of sustainability reports is increasing but still lags considerably behind non-disclosing corporations. to stimulate sustainable report writing. Tobin's Q is primarily affected by operational efficiency, business reputation and environmental sustainability reports (Kwon & Lee, 2019). Munir et al. (2020) explored the relationship between company efficacy and environmental responsibility. From 2001 to 2006, 32 Japanese companies listed on the Tokyo Stock Exchange were sampled. The association between the company's environmental preservation expenses, net profitability, and environmental benefit is statistically significant.

R2: Jordanian financial sector leverage affects corporate sustainability reports at the 5% level.

This paper investigates financial leverage and (CSR). Researchers discovered that reporting leverage enhanced leverage. Karlina, Mulyati, and Putri (2019) discovered that industry and financial leverage variables influence the 2014–2016 sustainability reports. Financial sustainability reports are attained through increasing capital, retained earnings, and financial leverage. From 2013 to 2017, Indonesian service businesses listed on the stock exchange had it (Sylvia, 2021). The results indicated that sustainability report disclosure is not a variable influencing financial leverage and firm value. According to Ho et al. (2021), high-performing corporate sustainability reports adapt to target leverage ratios more quickly. Improved corporate sustainability reports eliminate information imbalances and promote stakeholder engagement.

R3: Jordanian financial sector Corporate Sustainability Reports and Financial Performance are statistically significant at (< 5%).

For sustainable growth, each business sector must increase economic value, utilize natural resources sustainably, and satisfy social objectives. This emphasizes the necessity for businesses to monitor, manage, and disclose the performance of their sustainability reports. It boosts earnings (FP) after researching Jordanian banks and insurers, CSR and (FP). Business sustainability reports are significant (FP). Al Matarneh (2019) discovered comparable outcomes for thirteen Jordanian mining businesses on the Amman Stock Exchange. (CSR) (FP) (FP). The study indicated that the disclosure procedure and (FP) for Jordanian mining and extractive sectors' sustainability reports yield diverse results.

To demonstrate the impact of sustainability report disclosure on the institutional and financial performance (FP) of 64 Nigerian companies listed on the Nigerian Stock Exchange, as measured by return on equity, return on assets, and stock profitability (Onyinyechi & Ihendinihu, 2016). The study discovered that releasing sustainability reports improves businesses' institutional and financial performance, highlighting the need for such a system. Based on a sample of 651 Australian firms listed on the stock exchange between 2007 and 2013, Paun (2017) analyzed the sustainability reports of Romanian renewable energy companies (FP). The results demonstrated that corporations suspended investments and questioned their sustainability reports due to financial challenges. The economy and environment of Jordan's financial industry influence most findings.

R4: Efficiency Strategy affects Jordanian financial performance at a statistically significant level (< 5%).

The cooperation between the Jordanian financial sector and ES-FP is developing. The Jordanian financial sector's (ES) influence is statistically significant on (FP). Abd-Elmageed and Abdel Megeid (2020) discovered that a firm's operational efficiency, gross profit margin, and Tobin Q ratio positively influence (FP) (Musah, Kong, & Mensah, 2019). From 2008 through 2017, the study utilized audited and published annual reports from 15 publicly traded non-financial companies. According to the Pearson product-real-time correlation coefficient approach, operational efficiency exhibited a weakly negative relationship with corporate FP. From 2004 to 2013, Santosuosso analyzed the operational efficiency and performance of 215 non-financial companies listed on the Italian Stock Exchange (2014). Research findings The correlation between operational efficiency and business profitability, as measured by return on assets and equity, was minimal.

R5: Leverage affects Jordanian financial performance at a 5% level.

Leverage is the utilization of borrowed cash by a firm or investor. Leverage quantifies the proportion of equity and debt used to finance a company's assets. Indebtedness raises leverage. Many studies have linked financial leverage to (FP) and the significance of FP in modern businesses. We investigated the effect of financial leverage on (FP) in the Jordanian banking industry and discovered a positive correlation (FP). According to Huynh et al. (2022), the debt-equity ratio correlates positively with return on assets and sales growth and negatively with earnings per share, net profit margin, and return on equity. The study (Abubakar, 2020) discovered that financial leverage does not affect free cash flow and that the debt-to-equity ratio harms free cash flow, which contradicts the return on equity. According to Kajola et al. (2019), operating and joint leverage substantially affect performance (FP).

R6: Corporate Sustainability Reports mediate (< 5%) the relationship between Efficiency Strategy and Financial Performance in the Jordanian financial sector.

This study investigated how (CSR) mediates the connection between (ES) and (FP). We discovered that (CSR) positively mediated ES-ES (FP). In the United Kingdom, Ramanathan and Akanni (2015) found strong evidence of process efficiency moderating. Managers can use the outcomes of this study to increase environmental (FP) and operational efficiency concurrently. Osazefua (2019) analyzed the effect of operational efficiency on the financial sustainability reports of 16 listed manufacturing companies in Nigeria from 2009 to 2016, discovering that return on assets, operational efficiency, and sustainability reports have negative and positive relationships, respectively. Danso et al. (2019) can improve (FP) performance with environmental factors.

R7: Corporate Sustainability Reports significantly mediate the relationship between leverage and financial performance in the Jordanian financial sector at 5%.

This study investigated the role of CSR in mediating the connection between financial leverage and (FP). (CSR) acted as a helpful intermediary between financial prosperity and (FP). Between 2010 and 2022, Obaid and Jassim (2022) discovered a positive influence and a negative correlation between financial leverage and financial sustainability reports of industrial joint-stock enterprises registered on the Iraqi Stock Exchange. Businesses must employ a research sample to determine the optimal combination of internal funding sources. Financial sustainability reports are attained through increasing capital, retained earnings, and financial leverage. Kumar and Firoz (2022) analyzed the association between environmental, social, and governance (ESG) disclosures and financial performance (FP) for 77 firms between 2015 and 2019. Administration without social disclosures. ESG disclosures enhance FP, reputation, trustworthiness, and business ethics.

6. Conclusions

This study aims to examine the mediating effect of (CSR) on the connection between (ES) and (CSR) (FP). In this study, the quantitative approach and content analysis methodology was utilized for the data of the Jordanian financial sector, which consists of banks and insurance companies numbering (34), including (15) banks and (19) insurance companies that are listed in Amman for the period 2017-2021. Using the (STATA 14) and (PLS) programs, we analyzed 175 financial statements for enterprises and banks listed on the Amman Stock Exchange. Nonetheless, the data indicate a statistically significant association between (CSR) and (FP). There is a statistically significant association between (ES) and (ES) (FP). There is a significant statistical correlation between leverage and (FP). Then, (CSR) plays a statistically significant mediating function in the link between (ES) and (CSR) (FP). The study's results reveal that (CSR) plays a statistically significant effect in moderating the relationship between financial leverage and financial performance (FP). There is a statistically significant association between (ES) and (ES) (CSR). Moreover, statistically significant leverage exists on (CSR).

7. Recommendations

The present study makes several suggestions for practitioners and future researchers. First, using the Jordanian financial industry's available resources and capabilities to extend its services and diversify its investments to boost the company's efficiency, generate returns, and achieve profitability. Second is the need to improve the corporate sustainability reporting of the research sample firms and all Jordan Stock Exchange-listed companies. Finally, additional research is required to understand the connection between sustainable corporate practices and (FP). In addition, the study suggests that researchers interested in this area investigate the horizons of barriers to applying sustainability practices and their impact on financial performance, as well as the mediating role of enterprise risk management in the relationship between operational efficiency and financial leverage in the industrial sector.

Acknowledgment

This is to certify that the authors mentioned above have authored this paper and are submitting it for publication at the Social Space Journal, which has not been published before, is not under consideration for publication elsewhere, and all the authors have approved its publication. Furthermore, the authors agree to the following license and copyright agreement; they will not publish the submitted material elsewhere even if they withdraw their text from the editor unless they obtain the editor's consent for such a publication. Additionally, Authors grant the publisher, represented by the editor in the person of the Editor-in-Chief, a license to publish the article and identify itself as the original publisher. Authors grant the publisher, represented by the editor in the person of the Editor-in-Chief, commercial rights to produce hardcopy volumes of the journal for sale to libraries and individuals and Authors grant any third party the right to use the article freely as long as its original authors and citation details are identified. Finally, the article and any associated published material are distributed under the Creative Commons Attribution 3.0 License.

Funding

Any public or private unit did not support this work as it was merely on the account and responsibilities of the three authors of this paper.

References

Abd-Elmageed, M. H., & Abdel Megeid, N. S. (2020). Impact of Operational Efficiency and Financial Performance on Capital Structure using Earnings Management as a Moderator Variable. *Accounting Thought, 24*(3), 1029-1059. https://dx.doi.org/10.21608/atasu.2020.160431

Abubakar, A. (2020). Financial leverage and financial performance of oil and gas companies in Nigeria. *Open Journal of Management Science, 1*(1), 28-44. https://doi.org/10.52417/ojms.v1i1.78

Adams, C. A., & Larrinaga, C. (2019). Progress: engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal, 32*(8), 2367-2394. https://doi.org/10.1108/AAAJ-03-2018-3399

Ahmad, S., Wasim, S., Irfan, S., Gogoi, S., Srivastava, A., & Farheen, Z. (2019). Qualitative v/s. quantitative research-A summarized review. *Journal of Evidence Based Medicine and Healthcare, 6*(43), 2828-2832. https://doi.org/10.18410/jebmh/2019/587

Al-Mohareb, M., & Alkhalaileh, M. (2019). The Association between Earnings Management and Capital Structure: An Empirical Study on Jordanian Firms Listed in Amman Stock Exchange. *International Journal of Economics and Financial Issues, 9*(6), 106-112. https://doi.org/10.32479/ijefi.8583

Al-Wattar, Y. M. A., Almagtome, A. H., & Al-Shafeay, K. M. (2019). The role of integrating hotel sustainability reporting practices into an Accounting Information System to enhance Hotel Financial Performance: Evidence from Iraq. *African Journal of Hospitality, Tourism and Leisure, 8*(5), 1-16. https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_25_vol_8_5__2019_iraq.pdf

Al Matarneh, G. F. (2019). The Impact of Sustainability Dimensions in Improving the Quality of Financial Disclosure of Jordanian Shareholding Industrial Companies from the Point of View of External Jordanian Auditors. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 9*(3), 192-200. http://dx.doi.org/10.6007/IJARAFMS/v9-i3/6358

Albatayneh, R. M. S. (2014). *The effect of corporate sustainability performance on the relationship between corporate efficiency strategy and corporate financial performance.* (Doctoral dissertation). Universiti Utara Malaysia. https://etd.uum.edu.my/4352/1/s92225.pdf

Ali, A., Foroudi, P., & Palazzo, M. (2022). Examining the Influence of Corporate Identity on Corporate Reputation and Non-financial Brand Performance in the Context of Higher Education. In *The Emerald Handbook of Multi-Stakeholder Communication* (pp. 147-189). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80071-897-520221015

Alshehhi, A., Nobanee, H., & Khare, N. (2018). The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. *Sustainability, 10*(2), 494. https://doi.org/10.3390/su10020494

Andania, N. P., & Yadnya, I. P. (2020). The Effect of Sustainability Report Disclosure on Banking Company Financial Performance in Indonesia Stock Exchange. *American Journal of Humanities and Social Sciences Research, 4*(1), 60-67. https://www.ajhssr.com/wp-content/uploads/2020/01/H20416067.pdf

Asamoah, G. (2019). Relationship between corporate social responsibility and financial performance under slack resources theory: evidence from Ghanaian listed firms. *Grasag E-Journal, 1*(1), 23-49. https://www.researchgate.net/publication/335612383

Beji, R., Yousfi, O., Loukil, N., & Omri, A. (2021). Board diversity and corporate social responsibility: Empirical evidence from France. *Journal of Business Ethics, 173*, 133-155. https://doi.org/10.1007/s10551-020-04522-4

Bhatia, A., & Tuli, S. (2017). Corporate attributes affecting sustainability reporting: an Indian perspective. *International Journal of Law and Management, 59*(3), 322-340. https://doi.org/10.1108/IJLMA-11-2015-0057

Blanco, H., Blanco, J. R., Jurado-García, P. J., Ornelas, M., Jiménez-Lira, C., & Aguirre, S. I. (2023). Factor structure and reliability of the Lasher and Faulkender's Anxiety about Aging Scale in Mexican adults. *Ansiedad y Estrés, 29*(1), 1-9. https://www.ansiedadyestres.es/sites/default/files/rev/2023/anyes2023a1.pdf

Calace, D. (2016). *Battle of Giants: GRI vs SASB vs IR*. GreenBiz. https://www.greenbiz.com/article/battle-giants-gri-vs-sasb-vs-ir

Castelo Branco, M., Delgado, C., Ferreira Gomes, S., & Cristina Pereira Eugénio, T. (2014). Factors influencing the assurance of sustainability reports in the context of the economic crisis in Portugal. *Managerial Auditing Journal, 29*(3), 237-252. https://doi.org/10.1108/MAJ-07-2013-0905

Danso, A., Adomako, S., Amankwah-Amoah, J., Owusu-Agyei, S., & Konadu, R. (2019). Environmental sustainability orientation, competitive strategy and financial performance. *Business Strategy and the Environment, 28*(5), 885-895. https://doi.org/10.1002/bse.2291

Dimisyqiyani, E., Suhadak, S., & Kertahadi, K. (2015). The effect of financial leverage on firm value and market risk (research on consumer goods industries listed in Indonesian stock exchange in the year of 2010-2012). *Profit: Jurnal Administrasi Bisnis, 9*(2), 23-34. https://doi.org/10.21776/ub.profit.2015.009.02.3

Dirman, A. (2020). Financial distress: the impacts of profitability, liquidity, leverage, firm size, and free cash flow. *International Journal of Business, Economics and Law, 22*(1), 17-25. https://ijbel.com/wp-content/uploads/2020/08/IJBEL22_205.pdf

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of management Review, 20*(1), 65-91. https://doi.org/10.5465/amr.1995.9503271992

Endrikat, J., Guenther, E., & Hoppe, H. (2014). Making sense of conflicting empirical findings: A meta-analytic review of the relationship between corporate environmental and financial performance. *European Management Journal, 32*(5), 735-751. https://doi.org/10.1016/j.emj.2013.12.004

Engert, S., & Baumgartner, R. J. (2016). Corporate sustainability strategy–bridging the gap between formulation and implementation. *Journal of cleaner production, 113*, 822-834. https://doi.org/10.1016/j.jclepro.2015.11.094

Ernst, & Young. (2016). *Value of Sustainability Reporting: A study by EY and Boston College Center for Corporate Citizenship*. Ernst & Young LLP. http://www.ey.com/Publication/vwLUAssets/EY_Value_of_sustainability_reporting/%24FILE/EY-Value-of-Sustainability-Reporting.pdf

Falk, C. F., Vogel, T. A., Hammami, S., & Miočević, M. (2023). Multilevel mediation analysis in R: A comparison of bootstrap and Bayesian approaches. *Behavior Research Methods*, 1-15. https://doi.org/10.3758/s13428-023-02079-4

Fijałkowska, J., Zyznarska-Dworczak, B., & Garsztka, P. (2018). Corporate social-environmental performance versus financial performance of banks in Central and Eastern European countries. *Sustainability, 10*(3), 772. https://doi.org/10.3390/su10030772

Freeman, R. E., Dmytriyev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management, 47*(7), 1757-1770. https://doi.org/10.1177/0149206321993576

Ghardallou, W., & Alessa, N. (2022). Corporate social responsibility and firm performance in GCC countries: A panel smooth transition regression model. *Sustainability, 14*(13), 7908. https://doi.org/10.3390/su14137908

Ghenimi, A., Chaibi, H., & Omri, M. A. B. (2017). The effects of liquidity risk and credit risk on bank stability: Evidence from the MENA region. *Borsa Istanbul Review, 17*(4), 238-248. https://doi.org/10.1016/j.bir.2017.05.002

Gottschalk, P. (2005). IS/IT in knowledge management. In *Strategic Knowledge Management Technology* (pp. 87-144). IGI Global. https://doi.org/10.4018/978-1-59140-336-4.ch003

Goyal, P., Rahman, Z., & Kazmi, A. A. (2013). Corporate sustainability performance and firm performance research: Literature review and future research agenda. *Management Decision, 51*(2), 361-379. https://doi.org/10.1108/00251741311301867

Hanousek, J., Kočenda, E., & Shamshur, A. (2015). Corporate efficiency in Europe. *Journal of Corporate finance, 32*, 24-40. https://doi.org/10.1016/j.jcorpfin.2015.03.003

Heinberg, M., Liu, Y., Huang, X., & Eisingerich, A. B. (2021). A bad job of doing good: Does corporate transparency on a country and company level moderate corporate social responsibility effectiveness? *Journal of International Marketing, 29*(2), 45-61. https://doi.org/10.1177/1069031X20981870

Ho, L., Bai, M., Lu, Y., & Qin, Y. (2021). The effect of corporate sustainability performance on leverage adjustments. *The British Accounting Review, 53*(5), 100989. https://doi.org/10.1016/j.bar.2021.100989

Horváth, D. D. (2017). CSR Reporting Practices of Hungarian Banks. *International Journal of Engineering and Management Sciences, 2*(3), 70-81. https://doi.org/10.21791/IJEMS.2017.3.7.

Huynh, Q. L., Hoque, M. E., Susanto, P., Watto, W. A., & Ashraf, M. (2022). Does Financial Leverage Mediates Corporate Governance and Firm Performance? *Sustainability, 14*(20), 13545. https://doi.org/10.3390/su142013545

Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia. *The Journal of Asian Finance, Economics and Business, 8*(3), 423-431. https://doi.org/10.13106/jafeb.2021.vol8.no3.0423

Kajola, S. O., Alao, A., Sanyaolu, W. A., & Ojurongbe, O. J. (2019). Effect of liquidity and leverage on financial performance of Nigerian listed consumer goods firms. *The journal Contemporary Economy, 4*(3), 91-102. http://www.revec.ro/papers/190312.pdf

Karlina, W., Mulyati, S., & Putri, T. E. (2019). The Effect of Company's Size, Industrial Type, Profitability, and Leverage to Sustainability Report Disclosure. *JASS (Journal of Accounting for Sustainable Society), 1*(01), 32-32. https://doi.org/10.35310/jass.v1i01.68

Keramidou, I., Mimis, A., Fotinopoulou, A., & Tassis, C. D. (2013). Exploring the relationship between efficiency and profitability. *Benchmarking: An International Journal, 20*(5), 647-660. https://doi.org/10.1108/BIJ-12-2011-0090

Koju, L., Koju, R., & Wang, S. (2018). Macroeconomic and bank-specific determinants of non-performing loans: Evidence from Nepalese banking system. *Journal of Central Banking Theory and Practice, 7*(3), 111-138. https://doi.org/10.2478/jcbtp-2018-0026

Kumar, P., & Firoz, M. (2022). Does Accounting-based Financial Performance Value Environmental, Social and Governance (ESG) Disclosures? A detailed note on a corporate sustainability perspective. *Australasian Accounting, Business and Finance Journal, 16*(1), 1-33. https://doi.org/10.14453/aabfj.v16i1.4

Kwon, H.-B., & Lee, J. (2019). Exploring the differential impact of environmental sustainability, operational efficiency, and corporate reputation on market valuation in high-tech-oriented firms. *International Journal of Production Economics, 211*, 1-14. https://doi.org/10.1016/j.ijpe.2019.01.034

Kyere, M., & Ausloos, M. (2021). Corporate governance and firms financial performance in the United Kingdom. *International Journal of Finance & Economics, 26*(2), 1871-1885. https://doi.org/10.1002/ijfe.1883

Lamboglia, R., Fiorentino, R., Mancini, D., & Garzella, S. (2018). From a garbage crisis to sustainability strategies: The case study of Naples' waste collection firm. *Journal of Cleaner Production, 186*, 726-735. https://doi.org/10.1016/j.jclepro.2018.03.151

Landrum, N. E. (2018). Stages of corporate sustainability: Integrating the strong sustainability worldview. *Organization & Environment, 31*(4), 287-313. https://doi.org/10.1177/1086026617717456

Landrum, N. E., & Ohsowski, B. (2018). Identifying worldviews on corporate sustainability: A content analysis of corporate sustainability reports. *Business Strategy and the Environment, 27*(1), 128-151. https://doi.org/10.1002/bse.1989

Liang, X., Tu, Z. L., & Zheng, Y. X. (2019). Thermally activated delayed fluorescence materials: towards realization of high efficiency through strategic small molecular design. *Chemistry–A European Journal, 25*(22), 5623-5642. https://doi.org/10.1002/chem.201805952

Martínez-Ferrero, J., & Frias-Aceituno, J. V. (2015). Relationship between sustainable development and financial performance: international empirical research. *Business Strategy and the Environment, 24*(1), 20-39. https://doi.org/10.1002/bse.1803

Mitra, R. K., & Adhikary, B. K. (2017). Determinants of Financial Performance: Empirical Evidence from the Textile Sector in Bangladesh. *Journal of Accounting and Finance, 17*(8), 110-120. https://www.proquest.com/openview/a05511459d6f964da2e1bd0ed8488567

Munangi, E., & Bongani, A. (2020). An Empirical Analysis of the Impact of Credit Risk on the Financial Performance of South African Banks. *Academy of Accounting and Financial Studies Journal, 24*(3), 1-15. https://www.proquest.com/openview/1fb96ab59f06148ff9f000701b462267

Munir, M., Jajja, M. S. S., Chatha, K. A., & Farooq, S. (2020). Supply chain risk management and operational performance: The enabling role of supply chain integration. *International Journal of Production Economics, 227*, 107667. https://doi.org/10.1016/j.ijpe.2020.107667

Musah, M., Kong, Y., & Mensah, I. A. (2019). Exploring the link between operational efficiency and firms' financial performance: An empirical evidence from the Ghana Stock Exchange (GSE). *International Journal of Trend in Scientific Research and Development, 3*(4), 1-7. http://dx.doi.org/10.31142/ijtsrd23954

Nair, A. K. S., & Bhattacharyya, S. S. (2019). Mandatory corporate social responsibility in India and its effect on corporate financial performance: perspectives from institutional theory and resource-based view. *Business Strategy & Development, 2*(2), 106-116. https://doi.org/10.1002/bsd2.46

Obaid, H. J., & Jassim, H. A. (2022). Financial leverage and its impact on enhancing the financial sustainability of industrial joint-stock companies listed on the Iraq Stock Exchange for the period from 2010–to 2020. *Journal of Positive School Psychology, 6*(3), 8248–8256. https://www.journalppw.com/index.php/jpsp/article/view/5084

Oncioiu, I., Petrescu, A.-G., Bîlcan, F.-R., Petrescu, M., Popescu, D.-M., & Anghel, E. (2020). Corporate sustainability reporting and financial performance. *Sustainability, 12*(10), 4297. https://doi.org/10.3390/su12104297

Ong, T. S., Lee, A. S., Teh, B. H., & Magsi, H. B. (2019). Environmental innovation, environmental performance and financial performance: Evidence from Malaysian environmental proactive firms. *Sustainability, 11*(12), 3494. https://doi.org/10.3390/su11123494

Onoja, A. A., Okoye, E. I., & Nwoye, U. J. (2021). Global Reporting Initiative and sustainability reporting practices: a study of Nigeria and South Africa oil and gas firms. *Research Journal of Management Practice, 1*(12), 1-25. https://www.researchgate.net/profile/Nwoye-John-2/publication/359342223

Onyinyechi, O. C., & Ihendinihu, J. (2016). Impact of environmental and corporate social responsibility accounting on organizational financial performance: Evidence from selected listed firms in Nigeria stock exchange. *Journal of Emerging Trends in Economics and Management Sciences, 7*(5), 291-306. https://hdl.handle.net/10520/EJC-4cb4c1233

Osazefua, I. J. (2019). Operational efficiency and financial sustainability of listed manufacturing companies in Nigeria. *Journal of Accounting and Taxation, 11*(1), 17-31. https://doi.org/10.5897/JAT2018.0329

Paun, D. (2017). Sustainability and financial performance of companies in the energy sector in Romania. *Sustainability, 9*(10), 1722. https://doi.org/10.3390/su9101722

Peng, X., Tang, P., Yang, S., & Fu, S. (2020). How should mining firms invest in the multidimensions of corporate social responsibility? Evidence from China. *Resources policy*, *65*, 101576. https://doi.org/10.1016/j.resourpol.2019.101576

Pham, D. C., Do, T. N. A., Doan, T. N., Nguyen, T. X. H., & Pham, T. K. Y. (2021). The impact of sustainability practices on financial performance: empirical evidence from Sweden. *Cogent Business & Management, 8*(1), 1912526. https://doi.org/10.1080/23311975.2021.1912526

Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: in search of conceptual origins. *Sustainability science, 14*, 681-695. https://doi.org/10.1007/s11625-018-0627-5

Ramanathan, R., & Akanni, A. O. (2015). The moderating effect of operations efficiency on the links between environmental performance and financial performance: The UK evidence. *Asian Journal of Innovation and Policy, 4*(1), 76-102. https://doi.org/10.7545/ajip.2015.4.1.076

Ramus, T., Vaccaro, A., & Berrone, P. (2021). Time matters! How hybrid organizations use time to respond to divergent stakeholder demands. *Organization Studies, 42*(10), 1529-1555. https://doi.org/10.1177/0170840619900341

Reddy, K., & Gordon, L. (2010). The effect of sustainability reporting on financial performance: An empirical study using listed companies. *Journal of Asia Entrepreneurship and Sustainability, 6*(2), 19-42. https://hdl.handle.net/10289/7658

Santosuosso, P. (2014). Do efficiency ratios help investors to explore firm performances? Evidence from Italian listed firms. *International Business Research, 7*(12), 111-119. http://dx.doi.org/10.5539/ibr.v7n12p111

Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics, 9*(1), 4-11. https://doi.org/10.12691/ajams-9-1-2

Swarnapali, R., & Le, L. (2018). Corporate Sustainability Reporting and Firm Value: Evidence From a Developing Country. *International Journal of Organizational Innovation (Online), 10*(4), 69-78. https://www.proquest.com/openview/52ba1d3cfb28166846b4a885d4346680

Sylvia, S. (2021). Analysis Of The Effect Of Profitability, Leverage, And Liquidity On Firm Value With Sustainability Report Disclosure As Moderating Variable In Service Companies Listed On Indonesia Stock Exchange (IDX) IN 2013–2017. *International Journal of Public Budgeting, Accounting and Finance, 4*(1), 1-12. http://ijpbaf.org/index.php/ijpbaf/article/view/272

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Allyn & Bacon/Pearson Education.

Turban, D. B., & Greening, D. W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of management journal, 40*(3), 658-672. https://doi.org/10.5465/257057

Ukko, J., Nasiri, M., Saunila, M., & Rantala, T. (2019). Sustainability strategy as a moderator in the relationship between digital business strategy and financial performance. *Journal of Cleaner Production, 236*, 117626. https://doi.org/10.1016/j.jclepro.2019.117626

Ur Rehman, Z., Zahid, M., Rahman, H. U., Asif, M., Alharthi, M., Irfan, M., & Glowacz, A. (2020). Do corporate social responsibility disclosures improve financial performance? A perspective of the Islamic banking industry in Pakistan. *Sustainability, 12*(8), 3302. https://doi.org/10.3390/su12083302

Vangie, B. (2019). *Operational efficiency*. https://www.webopedia.com/TERM/O/operational_efficiency.htm

Wagner, W. J. (2019). *Professional military instructor identity and the effect of collaborative instructivism.* (Doctoral dissertation). University of Pretoria. http://hdl.handle.net/2263/71667

Wasara, T. M., & Ganda, F. (2019). The relationship between corporate sustainability disclosure and firm financial performance in Johannesburg Stock Exchange (JSE) listed mining companies. *Sustainability, 11*(16), 4496. https://doi.org/10.3390/su11164496

White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing, 83*(3), 22-49. https://doi.org/10.1177/0022242919825649

Wilson, M. (2003). Corporate sustainability: What is it and where does it come from. *Ivey business journal, 67*(6), 1-5. https://iveybusinessjournal.com/publication/corporate-sustainability-what-is-it-and-where-does-it-come-from/

Wood, D., & Ross, D. G. (2006). Environmental social controls and capital investments: Australian evidence. *Accounting & Finance, 46*(4), 677-695. https://doi.org/10.1111/j.1467-629X.2006.00180.x

Yang, C.-L., & Lai, J.-H. (2021). Influence of cross-listing on the relationship between financial leverage and R&D investment: A sustainable development strategy. *Sustainability, 13*(18), 10341. https://doi.org/10.3390/su131810341

Ye, N., Kueh, T.-B., Hou, L., Liu, Y., & Yu, H. (2020). A bibliometric analysis of corporate social responsibility in sustainable development. *Journal of Cleaner Production, 272*, 122679. https://doi.org/10.1016/j.jclepro.2020.122679

Yi, T. F., & Yu, C. K. (2010). *Research on sustainability reporting in Hong Kong.* (An Honours Degree Project Submitted to the School of Business in Partial Fulfillment of the Graduation Requirement for the Degree of Bachelor of Business Administration). Hong Kong Baptist University. https://libproject.hkbu.edu.hk/trsimage/hp/07009496.pdf

Zyadat, A. A. H. (2017). The Impact of Sustainability on the Financial Performance of Jordanian Islamic Banks. *International Journal of Economics and Finance, 9*(1), 55-63. https://doi.org/10.5539/ijef.v9n1p55