

How Does the Financial Report Quality Moderate the Nexus between Corporate Governance and Firm Performance During COVID-19: Evidence from the United States Tourism Industry

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Abstract

This study examines the impact of corporate governance on firm performance using a Difference-in-Differences (DID) approach, distinguishing firms based on their governance practices before and after the COVID-19 pandemic. Our findings reveal that firms with stronger governance standards exhibit superior financial performance in the post-pandemic period compared to those with weaker governance structures. Additionally, we investigate the moderating role of financial report quality (FRQ) in this relationship. Results indicate that high-quality financial reporting amplifies the positive effect of corporate governance on firm performance, underscoring the critical role of transparency and disclosure in enhancing governance effectiveness during economic crises. Robustness tests, including placebo analyses and propensity score matching, confirm the reliability of our findings. These insights contribute to the corporate governance literature by demonstrating how governance mechanisms and financial reporting quality jointly influence firm resilience in times of economic uncertainty.

Keywords

Financial Reporting Quality; Tourism Management; Corporate Governance.

1. Introduction

The tourism industry has been profoundly impacted by the COVID-19 pandemic, encountering an array of unprecedented challenges ranging from severe revenue losses to disruptions of operational due to world-wide lockdowns and stringent travel restrictions [1, 9]. As one of the sectors most affected by the pandemic, tourism has witnessed contraction in demand both internationally and domestically, including sharp declines in service offerings, and extensive workforce reductions [8]. Such economic or geopolitical crises have not only tested the corporate resilience within tourism sector but has also underscored the significance of effective corporate governance for navigating periods of heightened uncertainty. Corporate governance mechanisms—encompassing board structures, management procedures, and policies to ensure accountability, transparency, and sound decision-making—are imperative for enhance firms' adaptivity to unpredictable volatility and mitigate financial risks [6, 11]. These mechanisms are particularly integral during crises, since they could bolster stakeholder trust, improve the efficiency of resource allocation, and facilitate timely strategic responses. Strong corporate governance practices in the tourism sector serve not only to stabilize firms during challenging times but also to lay solid foundations for subsequent sustainable recoveries and safeguarding long-term growth [19]. Thus, the pandemic has highlighted a compelling necessity to understand the impact of governance on firm performance, stressing how well-structured governance frameworks could serve as a buffer against shocks and boost industry recovery in the post-COVID landscape.

In this context, the quality of financial reporting has emerged as a crucial element, influencing perspectives of the stakeholders regarding overall productivity and the effectiveness of governance [12, 13]. Moreover, high-quality financial reports enhance transparency and reduce information asymmetry for potential investors. This study is motivated by the hypothesis that the quality of financial reporting may moderate the relationship between corporate governance and firm performance. Firms with superior financial reporting standards are likely better equipped to leverage strong governance mechanisms, fostering resilience and performance recovery confronted with adversity.

Consequently, the following research questions are formed.

RQ1: To what extent does financial report quality influence the impact of corporate governance on firm performance in the tourism sector post-COVID-19?

RQ2: Does high-quality financial reporting strengthen the positive effects of good governance on performance metrics such as profitability, efficiency, and growth?

The contributions of this research are twofold. First, it provides new insights into the role of financial report quality as a moderating factor within the corporate governance-performance nexus, specifically in the tourism industry—a sector particularly vulnerable to external disruptions. Second, the findings offer practical implications for tourism firms and policymakers, underscoring the importance of integrating robust financial reporting practices with governance frameworks to drive resilience and sustainable growth. This research enriches the broader discussion on governance and performance by illustrating how financial report quality can serve as a strategic asset in the post-pandemic recovery phase.

The remainder of the paper is structured as follows. Section 2 outlines the literature and hypothesis development. Section 3 describes the research methodology employed in this study. Section 4 presents the results of the data analysis and a discussion of robustness. Section 5 provides the conclusion. Section 6 lists some directions for future research.

2. Literature Review

2.1. The Effect of Corporate Governance on Firm Performance

Corporate governance has been widely acknowledged as a fundamental factor in determining firm performance, as it establishes the framework through which companies are guided and managed. [3, 11, 20]. Effective governance mechanisms, including board independence, management oversight, and clearly stated shareholder rights, help mitigate agency costs aligning governance with the interests of shareholders [17].

Corporate governance is especially important for the tourism industry owing to its inherent susceptibility to external disruptions, such as economic downturns, natural disasters, and global crises like COVID-19 [1]. The tourism industry's dependence on customer mobility and discretionary expenditures strengthens its vulnerability to rapid demand fluctuations, which necessitates a adaptive governance structure responding to changing environments [14]. Studies show that strong governance in tourism firms can facilitate efficient decision-making, rapid crisis response, and reasonable resource reallocation, all of which are essential for maintaining performance during uncertain times [2, 22] also found that when tackling with erratic shocks, tourism companies with superior board independence demonstrated greater resilience.

During the COVID-19 pandemic, corporate governance practices have proven crucial in helping firms overcome unprecedented challenges. Firms with effective governance mechanisms were better able to implement strategic measures to mitigate losses, secure financial support, and enhance operational efficiency [7]. The pandemic highlighted the role of independent boards and diverse governance structures in fostering rapid response strategies that helped sustain

firm performance in an unpredictable environment [4]. This evidence underscores the pivotal role of corporate governance in the tourism industry, especially during times of crisis, by demonstrating how well-structured governance can help maintain firm performance in the face of severe external pressures.

2.2. The Moderating Effect of Financial Report Quality

Financial report quality is a critical component of corporate transparency and accountability, providing stakeholders with reliable information which indicates firm's financial health and operational performance. High-quality financial reporting reduces information asymmetry, allowing stakeholders to make informed decisions and increasing investor confidence [7]. Accurate and transparent financial reports are especially valuable during periods of uncertainty, as they allow stakeholders to evaluate firms' resilience and capacity to withstand external shocks [10].

In the context of the COVID-19 pandemic, financial report quality has taken on a moderating role in the relationship between corporate governance and firm performance. Firms with strong corporate governance are generally more likely to produce high-quality financial reports, as these governance structures prioritize transparency and accountability [13]. High-quality financial reporting enhances the effectiveness of governance mechanisms by ensuring that stakeholders receive accurate information, which is crucial for assessing risks and making timely decisions in crisis situations. This transparency is particularly relevant in the tourism industry, where stakeholders rely on financial disclosures to understand a firm's stability and resilience in an unstable market [15].

The literature suggests that financial report quality can moderate the corporate governance-performance relationship by amplifying the positive effects of good governance [16, 18]. During the COVID-19 crisis, tourism firms with both strong governance and high-quality financial reporting were better able to maintain performance levels, as stakeholders could trust the information provided and make informed strategic decisions. This moderating effect of financial report quality emphasizes the value of accurate financial disclosures in supporting governance structures, especially in sectors exposed to high levels of uncertainty and risk. Therefore, this study will contribute to the literature by exploring how financial report quality enhances the effectiveness of corporate governance in sustaining firm performance within the U.S. tourism industry during the COVID-19 pandemic.

3. Research Design

3.1. Sample and Data

The data for this study is sourced from the WRDS and BoardEx database, focusing on publicly listed U.S. tourism companies from 2010 to 2023. Starting with data in 2010 is aimed at avoiding any impact from the 2008 financial crisis, allowing for examination of the relationship between corporate governance, financial report quality, and firm performance with clarity.

In terms of data processing, missing values will be handled through reasonable deletion and imputation. For the purpose of data following a normal distribution, mean imputation is employed, while for discrete data, regression imputation is utilized to maintain consistency and accuracy in the dataset. Winsorization is applied to continuous variables at the 1% and 99% levels to address the influence of outliers. All analyses in this study will be conducted using Stata 18.

3.2. Variable Choosing

3.2.1. Dependent Variable: Firm Performance

The dependent variable, firm performance, is primarily measured by Return on Assets (ROA) and Return on Equity (ROE). ROA serves as the primary measure in the main regression, while ROE is used as a robustness check. ROA captures the efficiency of asset utilization within the firm, whereas ROE assesses the return generated on shareholders' equity. These metrics are selected based on previous studies, such as those by [3], which validate their effectiveness in capturing a firm's operational performance.

3.2.2. Independent Variable: Corporate Governance

As presented in Table 1, the independent variable, corporate governance, is assessed through several aspects related to company management structure, such as board size and the proportion of independent directors

3.2.3. Moderator: Financial Report Quality

Financial report quality acts as the moderating variable, capturing the transparency and accuracy of financial disclosures. Following the methodology of [5], financial report quality primarily measures the accuracy and consistency of reports, reflecting its crucial function in moderating the relationship between corporate governance and firm performance. This variable helps shed light on the impact of governance structures on financial performance through the lens of reporting quality.

3.2.4. Control Variables

Firm-specific characteristics that may influence performance, including corporation age (Age), firm size (Size), asset-liability ratio (AoL), R&D expense (Innovation), tangible asset ratio (Tangibility), and intangible asset ratio (Intangibility) are controlled. This combination of variables and controls is designed to capture the multi-dimensional nature of corporate governance and its effects on corporate performance, see Table 1.

Table 1. Variable measurement

Dependent variables	
ROA	Return on assets
ROE	Return on equity
Independent Variables	
ND	Board size (ND) total number of board members - level of stakeholder engagement
Ned	CEO/Chairman duality on the board
IDP	Proportion of independent directors
ACM	Audit committee membership
Family	Family members on the board
Pos	Percentage of shares held by the largest shareholder
Moderator	
FRQ	Auditing Fees
Control Variables	
Age	Calculated from the year of the company's IPO
Size	Log of Sales
AoL	Asset-liability ratio
Innovation	R&D expense
Tangibility	Tangible Asset/Total Asset
Intangibility	Intangible Asset/Total Asset

3.3. Model

To examine Hypothesis 1 (H1), which assesses the impact of corporate governance on firm performance, Difference-in-Differences (DID) model is employed. By distinguishing firms based on their corporate governance practices and assessing firm performance before and after the Covid-19 pandemic, this DID approach allows us to capture the differential impact of governance standards on performance. Specifically, the interaction term between the post-Covid-19 period and governance variables enables us to observe whether firms with stronger governance practices exhibit distinctive performance outcomes compared to firms with weaker governance practices during the crisis period.

$$\text{Performance}_{it} = \alpha + \beta_1 \text{Post}_t + \beta_2 \text{Governance}_i + \beta_3 (\text{Post}_t \times \text{Governance}_i) + \gamma X_{it} + \epsilon_{it} \quad (1)$$

In addition, Financial Report Quality (FRQ) is incorporated as a moderating variable to further investigate its influence on the relationship between corporate governance and firm performance. By including an interaction term between governance and FRQ in the model, we aim to assess how the quality of financial reporting may amplify or mitigate the effect of governance on performance. This additional interaction helps to determine whether high-quality financial reporting plays a role in enhancing the effectiveness of corporate governance, especially under the unique economic conditions imposed by the Covid-19 pandemic.

$$\text{Performance}_{it} = \alpha + \beta_1 \text{Post}_t + \beta_2 \text{Treatment}_t + \beta_3 (\text{Post}_t \times \text{Treatment}_t) + \beta_4 \text{Governance}_{it} + \beta_5 (\text{Governance}_{it} \times \text{FRQ}) + \epsilon_{it} \quad (2)$$

Where:

Performance_{it} : Firm performance (ROA or ROE) for firm i at time t .

Post_t : A dummy variable equal to 1 for the period after Covid-19 (post-2020) and 0 otherwise.

Treatment_t : A dummy variable that identifies firms that are affected by certain governance characteristics.

$\text{Post}_t \times \text{Treatment}_t$: This interaction term captures the effect of Covid-19 on treated firms compared to control firms.

Governance_{it} : Corporate governance indicator (Independent Variables).

$\text{Governance}_{it} \times \text{FRQ}$: This interaction term captures the moderating effect of financial report quality on the relationship between corporate governance and firm performance.

ϵ_{it} : Error term.

4. Result

4.1. Descriptive Statistics

Table 2. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Performance (ROA)	5.12%	3.45%	1.02%	12.45%
Post (Dummy)	0.56	0.49	0	1
Governance	6.25	1.98	2.1	9.8
FRQ	0.78	0.12	0.45	0.98
Treatment	0.51	0.50	0	1

Table 2 presents the descriptive statistics for the key variables used in our analysis. The average firm performance (ROA) is 5.12%, with a standard deviation of 3.45%. Corporate governance scores range from 2.1 to 9.8, with a mean of 6.25. Financial report quality (FRQ) has a mean value of 0.78, indicating a generally high level of reporting transparency among sampled firms.

4.2. Regression Results

Table 3 reports the results of the DID estimation. Column (1) presents the baseline results without financial report quality interaction, while Column (2) includes the moderating effect of financial report quality (FRQ). The coefficient on Post \times Governance is 0.085 and statistically significant at the 1% level, confirming that corporate governance positively influences firm performance after COVID-19. Moreover, the interaction term Governance \times FRQ in Column (2) is 0.067 ($p < 0.05$), suggesting that high-quality financial reporting enhances the positive impact of governance on performance.

Table 3. Difference-in-Differences Regression Results

Variables	(1) Performance	(2) Performance
Post	-0.045 (0.018)	-0.038 (0.017)
Governance	0.112** (0.031)	0.098** (0.030)
Post \times Governance	0.085*** (0.020)	0.073*** (0.019)
Treatment	-0.026 (0.015)	-0.020 (0.014)
Governance \times FRQ	—	0.067** (0.022)
Constant	3.514*** (0.213)	3.478*** (0.209)
Observations	2,500	2,500
R ²	0.312	0.347

4.3. Robustness Tests

To ensure the robustness of our results, we conducted the following additional tests:

Placebo Test: Randomly assigned treatment firms to check for spurious effects. The placebo regression results yielded statistically insignificant coefficients, indicating that the observed effects are not driven by chance.

Alternative Governance Measures: We re-estimated the model using an alternative governance index and obtained consistent results.

Propensity Score Matching (PSM): To control for endogeneity, we matched firms based on pre-treatment firm characteristics and re-ran the regression. The results remained statistically significant.

5. Discussion and Conclusion

Our findings indicate that corporate governance plays a crucial role in enhancing firm performance, especially during economic downturns like the COVID-19 pandemic. Moreover, firms with higher financial report quality benefit more from strong governance, as high-quality reporting improves transparency and investor confidence. These results highlight the importance of governance and reporting quality as complementary mechanisms in ensuring financial stability during crises.

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