check for updates

The impact of ESG disclosure on business performance of Vietnamese listed companies

 Hien Thi Thu Hoang[1+]
 Thuy Duong Nguyen[2]
 Thi Thu Trang La[3]

[1,2]Banking Academy of Vietnam, Vietnam.
[1]Email: hienhtt@hvnh.edu.vn
[2]Email: duongnt@hvnh.edu.vn
[3]International School of Banking Academy, Banking Academy of Vietnam, Vietnam.
[3]Email: latrang2004y@gmail.com

(+ Corresponding author)

ABSTRACT

This paper investigates the impact of ESG disclosure on the business performance of listed non-banking firms in Vietnam to fill the significant gap in the literature on ESG disclosure in developing countries like Vietnam, where challenges such as limited resources and measurement constraints exist. The data were collected from various sources, including annual reports, the World Bank, CafeF, and Vietstock, for 164 of the largest firms listed on the two stock exchanges of Vietnam from 2014 to 2023. The FGLS model was utilized to generate the statistical outcomes. The main finding is that ESG composite disclosure plays a significant role in business performance, yet the impact of its individual factors remains inconclusive. This study highlights how firms in developing economies should integrate ESG into their strategies, leveraging it as a tool for sustainable growth and competitive advantage.

Contribution/Originality: This study is among the first attempts to examine the impact of ESG on firm performance in Vietnam, considering the post-COVID-19 context in a developing country that has recently adopted ESG practices and utilizes unique ESG data. Unlike previous studies, this research employs the Environmental Kuznets Curve (EKC) theory as the primary theoretical framework to assess ESG's impact on firm performance. Finally, the findings provide a foundation for developing practical recommendations for relevant stakeholders.

1. INTRODUCTION

Over the past few decades, Environmental, Social, and Governance (ESG) factors have gained substantial attention in both academic research and corporate practice, particularly in the context of sustainable development. ESG disclosure, encompassing environmental impact, social responsibility, and governance structures, has become one of the crucial determinants that provide signals for investors, regulators, and other stakeholders to evaluate corporate performance and make investment decisions (Friede, Busch, & Bassen, 2015). Globally, ESG reporting has emerged as a key communication channel for firms to disclose their sustainability operations to stakeholders and the market. Many studies have investigated the impact of ESG disclosure on various aspects of company performance, yet conclusive findings have not been achieved (Khan, Serafeim, & Yoon, 2016). Some research suggests a positive correlation, indicating that ESG adherence enhances corporate reputation, reduces risk exposure, and improves financial stability (Eccles, Ioannou, & Serafeim, 2014). Conversely, other studies argue that ESG compliance imposes significant costs, potentially diminishing short-term financial performance, while some findings indicate a neutral effect, reflecting the complexity of this relationship (Revelli & Viviani, 2015).

82

In Vietnam, ESG considerations have recently gained attention as the country aligns its economic growth strategies with global sustainability standards. The Vietnamese government has implemented various regulatory measures to encourage ESG practices. Many of these measures were introduced after Vietnam's commitments at the COP26 summit, where it pledged to achieve net-zero emissions by 2050 (Vietnam Ministry of Natural Resources and Environment, 2021). As a result, Vietnamese businesses are increasingly implementing ESG regulations not only to meet regulatory requirements but also as a means to attract foreign direct investment and enhance market competitiveness (World Bank, 2022). The increasing emphasis on ESG in investment decisions, particularly in non-bank sectors, underscores the necessity for a deeper understanding of how ESG-related activities influence business performance within the local context.

Therefore, this study aims to examine the relationship between ESG disclosure and the financial outcomes of non-bank companies listed on the stock exchanges of Vietnam. Understanding the influence of ESG on company financial performance in Vietnam is especially crucial, considering the challenges presented by the COVID-19 pandemic and the ongoing economic recovery. This research highlights the ESG implications on sector-specific performance by focusing on non-bank firms, which may not fully adhere to standardized sustainable reporting as banks do. The findings of this study provide valuable insights for policymakers, business managers, and investors in Vietnam regarding ESG and its connection to firm performance, enabling these stakeholders to incorporate this relationship into their responsible decision-making processes. The results contribute new empirical evidence to the literature on the impact of ESG disclosure on firm performance in a developing country, utilizing unique data and measurement for ESG based on the Vietnam Sustainable Development Index (VNSI).

The rest of the paper proceeds as follows: Section 2 provides a literature review. Section 3 describes hypothesis development. Section 4 presents data, sampling, variables, and statistical regression models. Section 5 provides results and discussions, while Section 6 describes the conclusion.

2. LITERATURE REVIEW

2.1. ESG's Positive Impact on Business Performance

Recently, numerous studies have highlighted the significance of Environmental, Social, and Governance (ESG) disclosure, demonstrating its effectiveness in linking sustainability reporting with business performance (Adams, 2017). Several studies have examined the influence of ESG factors, either individually or collectively, on organizational performance. Velte (2017) concluded that ESG positively impacts return on assets (ROA) but does not significantly affect Tobin's Q (TBQ). Further analysis revealed that corporate governance (G) had the strongest effect on business outcomes compared to environmental (E) and social (S) factors. Ghosh (2013) found that large companies (SIZE), within business groups, with lower leverage (LEV), and greater investments in R&D, advertising, and operational costs in environmentally sensitive industries tend to achieve superior operating results using Ohlson's model to assess Indian firms with high social performance.

Furthermore, ESG is recognized as a key driver of innovation and competitive advantage, which can improve future operational performance (McGuire, Sundgren, & Schneeweis, 1988; Porter & Kramer, 2006). Legitimacy theory (Scherer & Palazzo, 2007) also emphasizes that a firm's right to operate is derived from its stakeholders through a social contract that must be continually reaffirmed. In this context, a company's ESG activities are essential for asserting its ethical responsibility. Several studies have observed a positive correlation between ESG and corporate performance (King & Lenox, 2002; Lee, Cin, & Lee, 2016; Stanwick & Stanwick, 1998).

Research by Achim, Borlea, and Mare (2016) on companies listed on the Bucharest Stock Exchange revealed a positive relationship between corporate governance quality and market value, highlighting that high governance scores can optimize corporate value. In the context of non-bank businesses, higher governance and employee-related scores tend to lead to better operational results, whereas environmental and social factors show a lesser impact on outcomes (Esteban-Sanchez, de la Cuesta-Gonzalez, & Paredes-Gazquez, 2017). Despite varying definitions and

approaches in examining ESG and corporate performance (Nelling & Webb, 2009; Peloza & Papania, 2008; Surroca, Tribó, & Waddock, 2010) there is broad consensus that ESG investments significantly influence business performance (Xie, Noorderhaven, & Wang, 2019; Yu, Guo, & Luu, 2018).

Similarly, Miralles-Quirós, Miralles-Quirós, and Nogueira (2018) found that ESG performance was positively received by Brazilian investors. Auer and Schuhmacher (2016) demonstrated that ESG-based investments generate market returns comparable to the broader market in the US and Asia Pacific. Barnett (2007) argued that financial benefits arise from improved stakeholder relationships leading to reduced transaction costs. King and Lenox (2000) explained that poor environmental performance often results in inefficiencies and competitive disadvantages which are linked to operational inefficiencies and cost reduction.

2.2. ESG's Negative or Neutral Impact on Business Performance

Several studies also highlight the negative or negligible impact of ESG on company performance. Friedman (1962) argued that a company's sole purpose is to enhance shareholder wealth, and non-financial goals, including sustainability, would reduce efficiency, contrasting with stakeholder theory. Some studies supporting this viewpoint include Mackey, Mackey, and Barney (2007) and Zivin and Small (2005) who argue that investors expect companies to maximize wealth without pursuing sustainability policies, suggesting that ESG initiatives are best suited for non-profit organizations.

Garcia, Mendes-Da-Silva, and Orsato (2017) found a negative relationship between environmental performance and profitability among companies in BRICS countries. However, this study used linear regression, which may have introduced endogeneity issues. Similarly, Jain, Aguilera, and Jamali (2017) observed a negative relationship between ESG scores and business performance. Achim et al. (2016) also found that environmental investments increased internal financial burdens leading to a decline in financial performance.

The trade-off theory as proposed by neoclassical researchers (Friedman, 1970; Vance, 1975; Wright & Ferris, 1997) suggests that a company's only social responsibility is to maximize shareholder value and ESG expenditures unnecessarily increase operational costs leading to reduced profits. Hillman and Keim (2001) found that investing in stakeholder relationships could be beneficial from a competitiveness perspective. However, ESG initiatives focused on the environment and society did not contribute significantly to corporate value creation. Brammer, Brooks, and Pavelin (2006) examined the UK market and found that companies with high ESG scores tended to achieve lower returns, suggesting that social activities could undermine shareholder value. Byun (2018) studying ESG ratings in South Korea found no positive effect on corporate value with environmental performance notably reducing it. A recent study using a large global dataset also found no significant relationship between most ESG activities and business performance (Xie et al., 2019).

2.3. ESG's Negligible or Nonexistent Impact on Operating Results

While many studies suggest both positive and negative correlations between ESG performance and operating results, some research finds no significant relationship. Atan, Alam, Said, and Zamri (2018); Galema, Plantinga, and Scholtens (2008) and Humphrey, Lee, and Shen (2012) all report that ESG performance has negligible or no effect on business performance. Humphrey et al. (2012) conducted a study of 249 UK companies, separating the effects of environmental, social, and governance factors, and concluded that investing in ESG does not incur significant costs in terms of risk or return, nor does it offer any tangible benefits. Siew, Balatbat, and Carmichael (2013) found no strong relationship between ESG scores and performance among Australian construction firms. Similarly, Chen and Metcalf (1980) found no relationship between environmental performance and financial performance.

2.4. Research Gap and Focus on Non-Bank Firms

The Environmental Kuznets Curve (EKC) theory, which posits that economic growth initially leads to environmental degradation but eventually results in a stabilization and decline of environmental damage as growth continues remains a central framework in understanding the relationship between economic development and the ecosystem (Kuznets, 1955). In the context of Vietnam, recent forecasts by the Asian Development Bank (2023) suggest that economic growth in 2023 will underperform expectations with industrial and service sectors slowing recovery and contributing to slower employment and consumption growth. Vietnam remains distant from the EKC's turning point despite the ongoing challenges from the global economic situation.

Vietnam has implemented several policy changes to promote sustainable development as ESG practices gain increasing global attention. The Vietnamese government has committed to addressing climate change, promoting green development, and transitioning to a low-carbon economy, as emphasized at COP26 by Prime Minister Pham Minh Chinh. ESG-related policies encompass all three dimensions: environmental protection (PDP 8 and the national climate strategy), social responsibility (Labor Code and Consumer Rights Protection), and corporate governance (Securities Law and Circular 96/2020/TT-BTC).

The Vietnam Stock Exchange has also introduced sustainability indices such as the VN100 and the Vietnam Sustainable Development Index (VNSI) to promote responsible investment. Vietnam's foreign FDI flows are shifting towards businesses that maintain financial stability and comply with ESG criteria, as ESG investments become increasingly influential in global markets.

This study aims to explore the impact of ESG on the operating results of non-bank companies listed on the Vietnam Stock Exchange. It seeks to contribute to the understanding of ESG's role in improving business performance during the post-pandemic recovery phase, providing valuable lessons for Vietnamese businesses and policy implications for the future development of ESG practices in Vietnam.

The current study adopts a distinct approach to measuring Environmental, Social, and Governance (ESG) factors, setting it apart from previous research in Vietnam, particularly in addressing the resource and measurement limitations prevalent in developing countries. A key aspect of our methodology is the utilization of data from the Vietnam Sustainability Index (VNSI) to represent the ESG disclosure levels of listed non-banking firms. This approach offers uniqueness and robustness to the research data for several reasons: Firstly, instead of constructing ESG indices independently from financial reports or other publicly available information that may lack uniformity and standardization, the study directly leverages an established and recognized dataset within the Vietnamese market. The VNSI, launched in July 2017 through a collaboration between the Ho Chi Minh Stock Exchange (HOSE), the German Agency for International Cooperation (GIZ), and the State Securities Commission (SSC), is a reputable index comprising leading companies selected from the VN100 index (the 100 largest companies listed on HOSE) that demonstrate the highest sustainability scores. The use of VNSI ensures objectivity and consistency in assessing the level of ESG compliance and disclosure by enterprises, which are rigorously screened based on comprehensive sustainability criteria.

Secondly, the study focuses on the impact of a composite ESG disclosure score rather than analyzing each Environmental (E), Social (S), or Governance (G) factor individually. Although separate regressions were conducted for individual E, S, and G factors, the results did not yield statistically significant relationships when examined in isolation, and thus these specific findings are not reported. This reinforces the hypothesis that a comprehensive and integrated ESG strategy is essential to realize tangible financial benefits, as opposed to isolated initiatives. This approach reflects the complexity of the relationship between ESG and business performance, while also emphasizing the importance of harmonizing sustainable aspects to optimize operational efficiency.

By relying on a new dataset that incorporates systematically developed criteria related to ESG, this study provides valuable and in-depth insights into the impact of ESG on the performance of non-banking enterprises in Vietnam, especially during the post-COVID-19 recovery phase. This not only contributes to the existing literature

on ESG in emerging markets but also offers crucial policy and practical implications for managers and investors in Vietnam.

3. THEORETICAL BACKGROUND OF THE RESEARCH

3.1. Environmental Kuznets Curve (EKC) Theory

The Environmental Kuznets Curve (EKC) theory, regarded as one of the central theories in economics, posits that initial economic expansion has a detrimental impact on the ecosystem, which continues to worsen alongside economic growth until reaching a turning point where environmental degradation stabilizes and subsequently declines, even as the economy continues to develop (Kuznets, 1955). According to the latest Asian Development Outlook (ADO) report published by the Asian Development Bank (ADB), Vietnam's economic growth rate in 2023 was projected at 5.2%, lower than the previous forecast of 5.8%, while growth in 2024 is expected to remain at 6% (Asian Development Bank, 2023). This weaker-than-expected recovery is likely to continue impeding industrial and service sector expansion, thereby slowing the recovery of employment and domestic consumption.

Over the past decade, the world has witnessed governance failures in managing financial crises. The year 2023 was marked by unprecedented global economic volatility, exacerbated by escalating threats from global warming and intensifying military conflicts across various regions (International Monetary Fund, 2023). Vietnam remains several decades away from reaching the EKC turning point, where economic activities no longer contribute to escalating environmental degradation while sustaining economic growth, given the current trajectory of economic development, particularly after the severe downturn caused by the COVID-19 pandemic and the ongoing recovery.

These findings reinforce the growing consensus on the need to balance environmental stability with socio-economic development, highlighting the importance of inclusive growth and responsible investment. Moreover, achieving sustainable economic growth requires strategic policymaking that integrates environmental governance with long-term development planning.

3.2. Research Hypothesis

The integration of Environmental, Social, and Governance (ESG) factors into corporate strategy has been widely recognized as a key determinant of financial performance. Prior research suggests that ESG adoption enhances operational efficiency, reduces regulatory risks, and fosters better stakeholder relationships, all of which contribute to improved return on assets (ROA) (Friede et al., 2015). Companies with strong ESG practices tend to optimize resource utilization and minimize environmental and social risks, leading to cost reductions and enhanced profitability (Giese, Lee, Melas, Nagy, & Nishikawa, 2019). Moreover, firms that actively engage in ESG initiatives have a positive reputation, attracting investors who prioritize sustainable development (Fatemi, Glaum, & Kaiser, 2018). Consequently, ESG implementation is expected to have a positive impact on ROA.

Return on equity (ROE) is a crucial indicator of a firm's profitability and efficiency in utilizing shareholder equity. Research has demonstrated that companies integrating ESG principles experience improved financial performance due to enhanced governance structures, better risk management, and increased investor confidence (Eccles et al., 2014). Firms with strong ESG commitments often achieve superior financial outcomes by mitigating reputational risks and fostering long-term shareholder value creation (Whelan, Atz, Van Holt, & Clark, 2021). Additionally, ESG-disclosing firms tend to attract institutional investors who prefer companies with sustainable business practices (Gillan, Koch, & Starks, 2021). As a result, ESG implementation is hypothesized to have a positive effect on ROE.

Total business quality (TBQ) encompasses various aspects of corporate sustainability, operational excellence, and overall financial health. Companies adopting ESG frameworks often experience improvements in business quality through enhanced transparency, better stakeholder engagement, and stronger risk management practices. Firms that prioritize ESG initiatives align their strategies with global sustainability standards, ensuring long-term competitiveness and resilience (Khan et al., 2016). Moreover, ESG-driven businesses are more likely to attract skilled

talent, foster innovation, and secure long-term investments, all of which contribute to overall business quality improvement (Orlitzky, Schmidt, & Rynes, 2003). Therefore, ESG adoption is expected to enhance TBQ.

The relationship between ESG adoption and profitability has been examined in various empirical studies, yielding mixed results. McWilliams and Siegel (2000) analyzed 28 companies adhering to traditional accounting standards and 51 firms adopting sustainability-driven reporting frameworks, finding no significant relationship between ESG adoption and financial performance. In contrast, firms with higher profitability are more likely to integrate ESG practices, emphasizing the role of financial stability in supporting sustainable initiatives. Marta, Smith, and Jones (2008) found that highly profitable firms engage in ESG adoption to enhance their corporate reputation and stakeholder trust.

The approach used by Stainbank (2014) to strengthen the relationship between sustainability policies and financial success is consistent with the use of return on equity (ROE) as an independent variable in this research. A study of 44 publicly listed Portuguese companies integrating ESG principles revealed a positive impact of profitability on corporate sustainability practices, suggesting that financially strong firms are more capable of implementing ESG strategies effectively (Grewal, Hauptmann, & Serafeim, 2021). The collective findings indicate that profitability plays a crucial role in determining the likelihood of ESG adoption, particularly among high-profitability firms.

The theory and empirical data in our study suggest that:

There is a positive relationship between ESG disclosure and firm performance.

4. METHODOLOGY

4.1. Data and Sample

This study utilizes secondary data to gather information about non-banking institutions. The data were collected between 2014 and 2023. During this period, a total of 164 enterprises were included, resulting in 1,640 samples used in the study. All data are considered secondary, as they are derived from accounting records, financial statements, annual reports of companies, and online newspapers such as CafeF and Vietstock. These data include figures such as profits, leverage, enterprise size, cash flow, fixed assets, Big 4, GDP, inflation, COVID-19, and Tobin's Q.

The period from 2014 to 2023 was selected to ensure a comprehensive analysis and to fully capture the financial and operational dynamics of non-bank enterprises within the context of Vietnam's economic landscape. This period is sufficiently long to observe financial trends and business performance, encompassing significant changes driven by macroeconomic factors and unexpected events. Notably, this timeframe includes the COVID-19 pandemic, which had a major outbreak starting in 2020, representing a significant shock to both the global and Vietnamese economies. COVID-19 had profound impacts on business operations through supply chain disruptions, profit fluctuations, financial structure adjustments, and strategic shifts. Collecting data allows the study to assess the pandemic's effects on key financial indicators such as profitability, leverage, cash flow, and corporate performance. Furthermore, selecting this period enables a comparative analysis of economic conditions before and after the pandemic, providing insights into the long-term impact of COVID-19 on non-bank enterprises. Data from 2014 to 2019 represent a stable pre-pandemic phase, while data from 2020 to 2023 allow for an evaluation of business recovery and adaptation in the post-pandemic period. [1]

4.2. Measurement Variables

This research model is investigated based on the factors that affect the dependencies of Vietnam non-bank firms, including nine variables: ESG (composite and single-based factors), firm-specific and macro-specific variables, and three impact variables: return on assets (ROA), return on equity (ROE), Tobin's Q (TBQ), size of the enterprise

---

[1] Data and Stata results are available upon reasonable requests.

(SIZE), Big 4, leverage (LEV), cash flow, fixed assets (FA), gross domestic product (GDP), inflation (INF), and COVID-19.

Table 1. Summary of variables.

Type of variables	Variables	Equation	Source of data	Expected sign
Dependent variables	ROA	Net income/ Total assets	Financial statement	+
	ROE	Net income/ Owner's equity		+
	Tobin's Q	SFA method		+
Independent variables	ESG	Enterprises applying ESG, having a value of 1 if the company discloses ESG operations and 0 otherwise.	Annual report, VNSI	+/-
	SIZE	Natural logarithm of total assets	Financial statement	+
	LEV	Total liabilities divided by owner's equity		+/-
	FA	Fixed assets / total assets		-
	GDP	Per capita income in Vietnam	World bank data	+
	INF	Inflation rate	Financial statement	+
	BIG4	Audited by one of the Big 4 accounting firm		+/-
	COVID-19	The outbreak of COVID-19 in Vietnam since 2020	Dummy variable	+
	CASHFLOW	Total cash – total liabilities	Financial statement	+

4.3. Model Specification

Following Athanasoglou, Brissimis, and Delis (2008); Kodan, Mehra, Singh, and Kumar (2011) and Pasiouras and Kosmidou (2007) the present study specifies a baseline regression equation that examines the correlation between ESG disclosure and firm performance. The dependent variables are firm performance, namely return on assets (ROAit), return on equity (ROEit), and Tobin's Q, which are functions of the aggregate measure of ESG, various firm-specific characteristics, and macroeconomic variables (Le & Ngo, 2020; Pasiouras & Kosmidou, 2007).

The baseline regression equation is specified as follows:

$$PERFORMANCE_{i,t} = \beta_0 + \beta_1 * ESG\ DISCLOSURE_{i,t} + \sum_{n=1}^{N} \beta_{2n} * Firm\ SPECIFIC_{i,t} + \sum_{k=1}^{K} \beta_{3k} * MACRO\ FACTORS_{i,t} + \beta_4 * COVID19_{i,t} + \varepsilon_{i,t}$$

In the above equations, the subscript i reflects the cross-sectional dimension across firms, t refers to time, that is, years, and e_{it} denotes the random error. ESG includes the four variables proxied for ESG disclosure of the firm, firm-specific denotes variables specific to the companies, and MACRO FACTORS incorporate GDP and inflation variables. The descriptions of all the variables and their references are depicted in Table 1.

Performance variables include ROA_it, the return on assets of company i in year t, ROE_it, the return on equity of company i in year t, and TBQ_it, which represents the total market value of company i relative to the replacement cost of its assets in year t. ε_it is the error term.

Table 2. Results of descriptive statistics.

Variables	N	Mean	Std.dev	Minimum	Maximum
ROA	1640	0.053	0.087	−0.244	0.427
TBQ	1640	3.013	8.039	0.105	62.744
ROE	1640	0.091	0.139	−0.539	0.471
SIZE	1640	28.113	1.963	22.914	32.382
LEV	1640	0.546	0.241	0.061	1
CASHFLOW	1621	0.231	0.883	1.047	5.428
FA	1625	0.539	1.091	0.000	8.595

Variables	N	Mean	Std.dev	Minimum	Maximum
BIG4	1640	0.374	0.484	0	1
GDP	1640	6.046	1.833	2.55	8.12
INF	1640	2.961	1.013	0.631	4.16
COVID-19	1640	0.3	0.458	0	1
ESG	1640	0.324	0.468	0	1
SIZE*ESG	1640	9.328	13.494	0	31.997

5. RESEARCH RESULTS AND DISCUSSIONS

5.1. Descriptive Statistics

Table 2 presents descriptive statistics for 1,640 firm-year observations of non-bank enterprises in Vietnam from 2014 to 2023. The average return on assets (ROA) is 0.053 with a standard deviation of 0.087, ranging from -0.244 to 0.427, indicating significant variations in asset utilization efficiency. Similarly, the return on equity (ROE) average is 0.091, with a wide range from -0.539 to 0.471, reflecting disparities in profitability. Tobin's Q (TBQ) has a mean of 3.013 and a large standard deviation of 8.039, suggesting considerable differences in firm valuation. Firm size (SIZE), measured as the log of total assets, has an average of 28.113 with a standard deviation of 1.963, ranging from 22.914 to 32.382, highlighting the diverse scale of enterprises. Leverage (LEV) has a mean of 0.546, ranging from 0.061 to 1, showing varying degrees of debt reliance. Fixed assets (FA) have a mean of 0.539 but exhibit high dispersion (SD = 1.091), implying differences in capital structure. The mean cash flow ratio (CASHFLOW) is 0.231, yet it shows substantial variation with values between 1.047 and 5.428, indicating differing financial liquidity across firms. Regarding audit quality, 37.4% of firms are audited by Big 4 firms (BIG4 = 0.374), reflecting a moderate level of high-quality audit engagement. Macroeconomic variables such as GDP growth (mean = 6.046%) and inflation (mean = 2.961%) show relatively stable trends, but COVID-19 disruptions (mean = 0.3) indicate that 30% of firm-year observations occurred during the pandemic. ESG adoption is limited, with an average score of 0.324, while the interaction term SIZE*ESG (mean = 9.328) suggests that larger firms are more likely to engage in ESG practices. These statistics provide critical insights into financial performance, firm characteristics, and macroeconomic influences, forming a foundation for further analysis of corporate behavior in Vietnam.

5.2. Diagnostic Tests

First, this study uses Pearson's correlation to identify multicollinearity issues. Table 4 illustrates the matrix of Pearson's correlation coefficients. The results in Table 3 reveal that the highest correlation between the independent variables is 0.74, between employee business productivity and employee expenditure. However, this correlation is not statistically significant. All correlation coefficients between pairs of independent variables are below 0.80, indicating no concern for multicollinearity in this study. The variance inflation factor (VIF) tests also support this conclusion. Second, several sequential tests were conducted to compare the effectiveness of three models Pooled Ordinary Least Squares (OLS), Fixed Effect Model (FEM), and Random Effect Model (REM) to select the most suitable regression model for the dataset. An F-test determined that the FEM was more appropriate. Similarly, Breusch and Pagan Lagrangian multiplier tests indicated that the REM was more efficient than OLS. Finally, the Hausman test was applied, leading to the selection of the REM as the most suitable model for comparing FEM and REM. After selecting the most appropriate model, it is necessary to examine whether the model exhibits any flaws or deficiencies through various tests, including the Wooldridge test for autocorrelation in panel data and the Breusch and Pagan Lagrangian multiplier test for random effects. The results show the presence of both autocorrelation and heteroscedasticity in the selected model. In such cases, it is advisable to address these issues using a method called Feasible Generalized Least Squares (FGLS) regression (Hansen, 2007). All of the above results are presented in Tables 4, 5, and 6 for the three dependent variables. We regress the individual items of E, S, and G on firm performance but find no significant results. Therefore, we choose not to report this empirical evidence.

Table 3. Correlation matrix between variables in the model.

Variables	TBQ	ROE	SIZE	LEV	CF	FA	BIG4	GDP	INF	COVID19	ESG	SIZE_ESG	ROA
TBQ	1.000												
ROE	−0.113	1.000											
	0.000												
SIZE	−0.412	0.132	1.000										
	0.000	0.000											
LEV	0.102	−0.254	−0.048	1.000									
	0.000	0.000	0.048										
CF	−0.050	−0.090	0.170	−0.035	1.000								
	0.043	0.000	0.000	0.151									
FA	0.330	−0.176	−0.446	0.326	−0.074	1.000							
	0.000	0.000	0.000	0.000	0.002								
BIG4	−0.179	0.144	0.430	−0.153	0.212	−0.209	1.000						
	0.000	0.000	0.000	0.000	0.000	0.000							
GDP	−0.013	−0.013	−0.044	−0.000	−0.005	0.003	−0.003	1.000					
	0.598	0.599	0.070	0.983	0.824	0.883	0.885						
INF	0.012	−0.066	0.017	0.006	−0.016	0.013	0.010	0.078	1.000				
	0.628	0.006	0.480	0.792	0.520	0.587	0.662	0.001					
COVID-19	0.032	−0.059	0.089	−0.010	−0.001	0.009	0.013	−0.287	0.057	1.000			
	0.187	0.000	0.000	0.676	0.948	0.698	0.593	0.000	0.019				
ESG	−0.151	0.169	0.231	−0.194	0.007	−0.189	0.255	−0.067	0.019	0.103	1.000		
	0.000	0.000	0.000	0.000	0.761	0.000	0.000	0.006	0.425	0.000			
SIZE_ESG	−0.155	0.165	0.259	−0.188	0.013	−0.188	0.265	−0.069	0.020	0.107	0.997	1.000	
	0.000	0.000	0.000	0.000	0.582	0.000	0.000	0.005	0.412	0.000	0.000		
ROA	−0.058	0.811	−0.005	−0.350	−0.090	0.017	0.122	0.006	−0.023	−0.038	0.16	0.163	1.000
	0.017	0.000	0.829	0.000	0.000	0.472	0.000	0.785	0.347	0.123	0.00	0.000	

Table 4. Models with ESG and Non-Bank Firm Performance (ROA).

Variables	Panel A	Panel B	Panel C	Panel D
SIZE	0.000	-0.009**	-0.002	0.001*
	0.04	-2.21	-1.27	1.68
LEV	-0.134***	-0.064***	-0.108***	-0.135***
	-15.65	-3.75	-9.23	-28.74
CF	-0.010***	-0.002	-0.007***	-0.011***
	-4.85	-0.65	-2.61	-7.96
FA	0.016***	-0.003	0.010***	0.017***
	7.07	-0.68	3.23	7.01
BIG4	0.017***	0.029	0.021***	0.014***
	3.95	1.47	2.98	7.40
GDP	-0.000	-0.000	-0.000	0.000
	-0.25	-0.69	-0.43	0.72
INF	-0.002	-0.002	-0.002*	-0.002***
	-1.56	-1.60	-1.74	-2.67
COVID-19	-0.010**	-0.005	-0.009**	-0.009***
	-2.41	-1.37	-2.33	-4.97
ESG	0.075	-0.088	0.031	0.131***
	1.05	-0.69	0.34	3.71
SIZE_ESG	-0.001	0.003	-0.000	-0.004***
	-0.77	0.72	-0.19	-3.30
_cons	0.120***	0.355***	0.185***	0.085***
	3.03	3.02	3.19	4.61
N: 1640				

Note: FGLS is the key estimation technique. Panel A measured by OLS, panel B measured by FE, panel C measured by RE and panel D measured by FGLS*, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

Table 5. Models with ESG and non – bank firm performance (ROE).

Variables	Panel A	Panel B	Panel C	Panel D
SIZE	0.007***	-0.011*	0.002	0.006***
	3.14	-1.70	0.67	5.23
LEV	-0.120***	-0.018	-0.085***	-0.114***
	-8.32	-0.64	-4.20	-12.76
CF	-0.020***	-0.002	-0.012**	-0.021***
	-5.38	-0.41	-2.34	-7.67
FA	-0.003	-0.005	-0.005	-0.006*
	-0.94	-0.60	-1.04	-1.84
BIG4	0.022***	0.038	0.030**	0.024***
	2.93	1.18	2.38	5.65
GDP	-0.001	-0.002*	-0.002	0.000
	-0.97	-1.67	-1.33	0.75
INF	-0.009***	-0.009***	-0.009***	-0.003**
	-3.01	-3.38	-3.52	-2.41
COVID-19	-0.023***	-0.015**	-0.021***	-0.017***
	-3.27	-2.36	-3.43	-4.53
ESG	0.331***	-0.040	0.225	0.348***
	2.70	-0.20	1.38	5.21
SIZE_ESG	-0.010**	0.001	-0.007	-0.011***
	-2.48	0.18	-1.30	-4.73
_cons	-0.012	0.469***	0.107	-0.024
	-0.19	2.44	1.04	-0.71
N: 1640				

Note: FGLS is the key estimation technique. Panel A measured by OLS, panel B measured by FE, panel C measured by RE and panel D measured by FGLS*, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

5.3. Regression Results

The regression results indicate that leverage (LEV) has a consistently strong negative impact on firm performance, emphasizing the need for capital structure optimization. Firm size (SIZE) shows mixed effects, with larger firms sometimes facing inefficiencies. Fixed asset investment (FA) and audits by Big 4 firms (BIG4) positively

contribute to profitability, highlighting the importance of infrastructure and financial transparency. Macroeconomic factors, particularly inflation (INF), negatively affect companies, suggesting the need for stronger inflation control policies. The COVID-19 pandemic significantly reduced profitability, reinforcing the necessity for crisis management strategies. ESG factors (ESG) show potential long-term benefits, although larger companies may initially face challenges in balancing sustainability investments with profitability. These findings suggest that Vietnamese companies should focus on improving liquidity management, transparency, and ESG integration while mitigating financial risks to enhance long-term resilience. Single E, S, and G indicator coefficients are positive but not statistically significant; therefore, the results are not reported.

The regression results in the table indicate the impact of various firm-specific and macroeconomic factors on the dependent variable across different models (panels A, B, C, and D). Firm size (SIZE) shows mixed results, being positively significant in panels A and D but negatively significant in panel B. Leverage (LEV) consistently exhibits a strong negative relationship across all models, suggesting that higher leverage reduces firm performance. Cash flow (CF) also negatively impacts performance with statistical significance in panels A, C, and D. Fixed assets (FA) do not show a significant impact, except for panel D, where they negatively influence performance. BIG4 firms positively impact firm outcomes in panels A, C, and D, indicating that firms audited by top accounting firms tend to perform better. Inflation (INF) negatively affects firm performance in all models, highlighting the adverse effects of rising inflation. COVID-19 has a significantly negative impact across all panels, reinforcing its detrimental effect on financial performance. ESG performance is positively significant in panels A and D, suggesting that firms with strong ESG practices achieve better outcomes. Lastly, the interaction term SIZE_ESG is negatively significant in panels A and D, indicating that larger firms with ESG initiatives may face challenges in leveraging ESG benefits. These findings highlight the complex interplay between financial, economic, and sustainability factors in shaping firm performance.

Table 6. Models with ESG and non – bank firm performance (TBQ).

Variables	Panel A	Panel B	Panel C	Panel D
SIZE	-1.601***	-1.283***	-1.330***	-0.599***
	-14.05	-5.42	-7.38	-13.89
LEV	-0.215	-2.211**	-1.631*	0.729***
	-0.31	-2.27	-1.87	5.17
CF	0.113	-0.215	-0.128	0.041
	0.63	-0.90	-0.58	1.37
FA	0.216	2.007***	1.731***	0.174*
	1.11	6.93	6.88	1.90
BIG4	0.139	-0.048	0.074	0.062
	0.38	-0.04	0.11	1.23
GDP	-0.025	-0.043	-0.043	-0.010
	-0.29	-0.81	-0.80	-0.78
INF	0.057	0.032	0.036	0.023
	0.38	0.35	0.39	1.00
COVID-19	1.087***	0.833***	0.877***	0.248***
	3.06	3.65	3.88	4.46
ESG	-28.91***	1.155	-5.190	-5.642***
	-4.86	0.16	-0.78	-3.78
SIZE_ESG	0.978***	-0.028	0.181	0.190***
	4.71	-0.11	0.79	3.72
_cons	447.60***	38.88***	40.16***	17.90***
	14.67	5.87	8.00	14.03
N: 1640				

Note: FGLS is the key estimation technique. Panel A measured by OLS, panel B measured by FE, panel C measured by RE and panel D measured by FGLS*, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

The regression results indicate that the SIZE variable has a significant and negative impact across all panels, with large negative coefficients and high t-values, suggesting that larger firms tend to perform worse in this context.

The LEV variable shows a statistically significant negative effect in panels B and C, while it has a positive and significant impact in panel D, indicating that leverage affects firm performance differently depending on the model specification. The CF variable does not exhibit much statistical significance, except in panel D, where it has a small but significant effect. The FA variable has a strong positive and statistically significant impact in panels B and C, suggesting that fixed assets contribute to firm performance under certain conditions. The BIG4 variable is not statistically significant in most cases, implying that being audited by a Big 4 firm does not strongly influence performance. The GDP variable does not show any meaningful impact, while INF has a small positive coefficient but lacks statistical significance across all panels.

A key finding is the strong and statistically significant positive effect of COVID-19 across all panels, indicating that the pandemic had a substantial impact on firm performance. Meanwhile, the ESG variable has a significantly negative impact in panels A and D, but it is not statistically significant in panels B and C, suggesting that ESG practices may not consistently influence firm performance. The SIZE_ESG variable exhibits a positive and statistically significant effect in panels A and D, implying that the interaction between firm size and ESG policies plays a role in performance. Lastly, the constant term (_cons) has large and highly significant values in all panels, indicating that other unaccounted factors might be influencing the model.

6. CONCLUSION

This study examined the individual impacts of Environmental, Social, and Governance (ESG) factors on the financial performance of non-bank firms. The results indicate that when analyzed separately, none of these factors exhibit a statistically significant effect on firm performance. This suggests that implementing ESG policies in isolation may not be sufficient to yield tangible financial benefits. Instead, a comprehensive and integrated ESG strategy is required to optimize its impact on business outcomes. This study finds no significant evidence that environmental initiatives influence the financial performance of non-bank firms, although environmental (E) considerations have gained increasing attention. One possible explanation is the high initial investment costs associated with green initiatives, while financial returns often materialize in the long term. Furthermore, non-bank firms operate in diverse industries, some of which are less directly affected by environmental regulations compared to sectors like manufacturing or energy. Similarly, the social (S) dimension, which encompasses corporate social responsibility (CSR), employee welfare, and community engagement, does not exhibit a significant impact on firm performance. A plausible reason is that the benefits of social investments take time to translate into measurable financial outcomes, such as improved employee productivity, increased customer loyalty, or enhanced corporate reputation. However, in the long run, strong social policies may help firms mitigate operational risks and strengthen competitive advantages. Regarding governance (G) factors, including financial transparency, corporate governance efficiency, and shareholder rights, the findings indicate no direct impact on firm performance. One possible explanation is that governance structures vary across industries, leading to differences in how governance practices influence financial outcomes. Additionally, further governance improvements may not immediately result in financial gains for companies with established governance systems.

The absence of statistically significant effects (unreported results) when examining individual ESG components highlights a critical point. Non-bank firms should adopt an integrated rather than a fragmented approach to ESG implementation. Instead of focusing on isolated environmental, social, or governance initiatives, firms should develop a holistic ESG strategy that ensures synergies among these dimensions to maximize financial and operational efficiency. Future research should explore how ESG factors influence different non-bank industries and investigate the interactions between ESG components and sector-specific characteristics. Moreover, firms should proactively develop long-term ESG strategies that balance financial objectives with sustainability goals. Rather than perceiving ESG as a mere compliance requirement, firms can leverage it as a strategic tool to enhance brand value, attract

investment, and build customer trust, ultimately securing a competitive advantage in an increasingly complex business landscape.

The findings of this study emphasize the complex relationship between ESG practices and firm performance. While ESG factors are increasingly recognized as critical for long-term sustainability, their immediate impact on financial performance remains mixed. The results show that ESG has a significantly negative effect in certain contexts (panels A and D), while it is not statistically significant in others (panels B and C). This suggests that ESG initiatives may impose short-term costs or operational challenges, particularly in firms that are not yet fully integrated with sustainable practices.

However, the interaction between firm size and ESG (SIZE_ESG) shows a positive and significant impact in specific cases, indicating that larger firms with effective ESG strategies may benefit more from sustainability initiatives. This aligns with the broader perspective that, while ESG adoption may initially require significant investment, it can contribute to long-term value creation if strategically implemented.

The key takeaway from these findings is that ESG adoption alone is not a guaranteed driver of performance; rather, its effectiveness depends on how well it is aligned with firm strategy, governance, and operational capacity. Firms should focus on building internal capabilities, ensuring regulatory compliance, and leveraging ESG initiatives to enhance overall efficiency and reputation to maximize the benefits of ESG integration. Future research should explore the long-term financial impact of ESG investments and how different levels of ESG commitment influence firm value over time.

The study suggests that while ESG is an essential consideration for sustainability and corporate governance, its successful implementation requires a balanced approach one that integrates sustainability with financial and technological strategies to drive meaningful impact.

REFERENCES

Achim, M.-V., Borlea, S.-N., & Mare, C. (2016). Corporate governance and business performance: Evidence for the Romanian economy. *Journal of Business Economics and Management, 17*(3), 458-474. https://doi.org/10.3846/16111699.2013.834841

Adams, C. A. (2017). *The sustainable development goals, integrated thinking and the integrated report.* Edinburgh/London: ICAS & Accounting for Sustainability (A4S).

Asian Development Bank. (2023). *Asian development outlook 2023: Economic forecasts for Vietnam.* Manila, Philippines: Asian Development Bank.

Atan, R., Alam, M. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal, 29*(2), 182-194. https://doi.org/10.1108/MEQ-03-2017-0033

Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money, 18*(2), 121-136. https://doi.org/10.1016/j.intfin.2006.07.001

Auer, B. R., & Schuhmacher, F. (2016). Do socially responsible investments pay? A global perspective. *Financial Markets and Portfolio Management, 30*(3), 233-264.

Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review, 32*(3), 794-816. https://doi.org/10.5465/AMR.2007.25275520

Brammer, S., Brooks, C., & Pavelin, S. (2006). Corporate social performance and stock returns: UK evidence from disaggregate measures. *Financial Management, 35*(3), 97-116. https://doi.org/10.1111/j.1755-053X.2006.tb00149.x

Byun, H. S. (2018). The impact of ESG ratings on firm performance: Evidence from South Korea. *Asian Business & Management, 17*(4), 298-322.

Chen, K. H., & Metcalf, R. W. (1980). The relationship between pollution control record and financial indicators revisited. *The Accounting Review, 55*(1), 168-177.

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science, 60*(11), 2835-2857. https://doi.org/10.1287/mnsc.2014.1984

Esteban-Sanchez, P., de la Cuesta-Gonzalez, M., & Paredes-Gazquez, J. D. (2017). Corporate social performance and its relation with corporate financial performance: International evidence in the banking industry. *Journal of Cleaner Production, 162*, 1102-1110. https://doi.org/10.1016/j.jclepro.2017.06.127

Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal, 38*, 45-64. https://doi.org/10.1016/j.gfj.2017.03.001

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment, 5*(4), 210-233. https://doi.org/10.1080/20430795.2015.1118917

Friedman, M. (1962). *Capitalism and freedom*. Chicago, IL: University of Chicago Press.

Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*, 122–126.

Galema, R., Plantinga, A., & Scholtens, B. (2008). The stocks at stake: Return and risk in socially responsible investment. *Journal of Banking & Finance, 32*(12), 2646-2654. https://doi.org/10.1016/j.jbankfin.2008.06.002

Garcia, A. S., Mendes-Da-Silva, W., & Orsato, R. J. (2017). Sensitive industries produce better ESG performance: Evidence from emerging markets. *Journal of Cleaner Production, 150*, 135-147. https://doi.org/10.1016/j.jclepro.2017.02.180

Ghosh, S. (2013). The impact of corporate social responsibility on firm performance: Evidence from India. *Managerial Finance, 39*(4), 404–428.

Giese, G., Lee, L.-E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG investing: How ESG affects equity valuation, risk, and performance. *The Journal of Portfolio Management, 45*(5), 69-83. https://doi.org/10.3905/jpm.2019.45.5.069

Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance, 66*, 101889. https://doi.org/10.1016/j.jcorpfin.2021.101889

Grewal, J., Hauptmann, C., & Serafeim, G. (2021). Material sustainability information and stock price informativeness. *Journal of Business Ethics, 171*(3), 513-544. https://doi.org/10.1007/s10551-020-04451-2

Hansen, C. B. (2007). Generalized least squares inference in panel and multilevel models with serial correlation and fixed effects. *Journal of Econometrics, 140*(2), 670-694. https://doi.org/10.1016/j.jeconom.2006.07.011

Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal, 22*(2), 125-139.

Humphrey, J. E., Lee, D. D., & Shen, Y. (2012). Does it cost to be sustainable? *Journal of Corporate Finance, 18*(3), 626-639. https://doi.org/10.1016/j.jcorpfin.2012.03.002

International Monetary Fund. (2023). *World economic outlook: Global economic volatility and financial governance challenges*. Washington, D.C: International Monetary Fund.

Jain, T., Aguilera, R. V., & Jamali, D. (2017). Corporate governance and sustainability: A review and research agenda. *Corporate Governance: An International Review, 25*(3), 147-164.

Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review, 91*(6), 1697-1724. https://doi.org/10.2308/accr-51383

King, A., & Lenox, M. (2002). Exploring the locus of profitable pollution reduction. *Management Science, 48*(2), 289-299. https://doi.org/10.1287/mnsc.48.2.289.258

King, A. A., & Lenox, M. J. (2000). Industry self-regulation without sanctions: The chemical industry's responsible care program. *Academy of Management Journal, 43*(4), 698-716.

Kodan, A. S., Mehra, S., Singh, K., & Kumar, R. (2011). Employee productivity and its impact on bank performance: Case study of SBI&A. *Journal of Banking Financial Services and Insurance Research, 1*(2), 51-63.

Kuznets, S. (1955). Economic growth and income inequality. *American Economic Review, 45*(1), 1-28.

Le, T., & Ngo, X. (2020). The impact of ESG disclosure on firm performance: Evidence from emerging markets. *Emerging Markets Finance and Trade, 56*(9), 2081-2098.

Lee, K.-H., Cin, B. C., & Lee, E. Y. (2016). Environmental responsibility and firm performance: The application of an environmental, social and governance model. *Business Strategy and the Environment, 25*(1), 40-53. https://doi.org/10.1002/bse.1855

Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: Investor preferences and corporate strategies. *Academy of Management Review, 32*(3), 817-835. https://doi.org/10.5465/AMR.2007.25275676

Marta, C., Smith, L., & Jones, R. (2008). Corporate profitability and ESG adoption: The role of reputation and stakeholder trust. *Journal of Business Ethics, 85*(4), 123-140.

McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *Academy of Management Journal, 31*(4), 854-872.

McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: Correlation or misspecification? *Strategic Management Journal, 21*(5), 603-609.

Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Nogueira, J. M. (2018). Does corporate social responsibility impact equity risk? Evidence for the European financial market. *Corporate Social Responsibility and Environmental Management, 25*(6), 1239-1248.

Nelling, E., & Webb, E. (2009). Corporate social responsibility and financial performance: The "virtuous circle" revisited. *Review of Quantitative Finance and Accounting, 32*(2), 197-209. https://doi.org/10.1007/s11156-008-0090-y

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies, 24*(3), 403-441. https://doi.org/10.1177/0170840603024003910

Pasiouras, F., & Kosmidou, K. (2007). Factors influencing the profitability of domestic and foreign commercial banks in the European Union. *Research in International Business and Finance, 21*(2), 222-237. https://doi.org/10.1016/j.ribaf.2006.03.007

Peloza, J., & Papania, L. (2008). The missing link between corporate social responsibility and financial performance: Stakeholder salience and identification. *Corporate Reputation Review, 11*(2), 169-181. https://doi.org/10.1057/crr.2008.13

Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review, 84*(12), 78-92.

Revelli, C., & Viviani, J.-L. (2015). Financial performance of socially responsible investing (SRI): What have we learned? A meta-analysis. *Business Ethics: A European Review, 24*(2), 158-185.

Scherer, A. G., & Palazzo, G. (2007). Toward a political conception of corporate responsibility: Business and society seen from a Habermasian perspective. *Academy of Management Review, 32*(4), 1096-1120. https://doi.org/10.5465/AMR.2007.26585837

Siew, R. Y. J., Balatbat, M. C. A., & Carmichael, D. G. (2013). The impact of ESG disclosures on financial performance in Australian firms. *Journal of Environmental Management, 116*, 55-66.

Stainbank, L. J. (2014). Sustainability reporting and financial performance: An empirical investigation. *African Journal of Business Ethics, 8*(1), 50-65.

Stanwick, P. A., & Stanwick, S. D. (1998). The relationship between corporate social performance, and organizational size, financial performance, and environmental performance: An empirical examination. *Journal of Business Ethics, 17*(2), 195-204. https://doi.org/10.1023/A:1005784421547

Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal, 31*(5), 463-490. https://doi.org/10.1002/smj.820

Vance, S. G. (1975). Are socially responsible corporations good investment risks? *Management Review, 64*(8), 18-24.

Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility, 8*(2), 169-178. https://doi.org/10.1108/JGR-11-2016-0029

Vietnam Ministry of Natural Resources and Environment. (2021). *Vietnam's commitments at COP26*. Retrieved from https://en.monre.gov.vn/viet-nams-actions-in-implementing-cop26-commitments-8419.htm

Whelan, T., Atz, U., Van Holt, T., & Clark, C. (2021). *ESG and financial performance: Uncovering the relationship by aggregating evidence from 2015–2020*. NYU Stern Center for Sustainable Business. Retrieved from https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021%20Rev_0.pdf

World Bank. (2022). *Sustainable development in Vietnam: A policy perspective*. Retrieved from https://www.worldbank.org/en/country/vietnam/overview

Wright, P., & Ferris, S. P. (1997). Agency conflict and corporate strategy: The effect of divestment on corporate value. *Strategic Management Journal, 18*(1), 77-83.

Xie, X., Noorderhaven, N., & Wang, J. (2019). The impact of environmental, social, and governance (ESG) disclosure on firm performance: The mediating role of innovation. *Journal of Business Research, 97*, 222-233.

Yu, E. P.-Y., Guo, C. Q., & Luu, B. V. (2018). Environmental, social and governance transparency and firm value. *Business Strategy and the Environment, 27*(7), 987-1004. https://doi.org/10.1002/bse.2047

Zivin, J. G., & Small, A. (2005). A Modigliani-Miller theory of altruistic corporate social responsibility. *The B.E. Journal of Economic Analysis & Policy, 5*(1), 1-19. https://doi.org/10.1515/1538-0653.1369