Relationship between ESG strategies and financial performance of hotel industry in China: An empirical study

Xueyan Ding[1], Cheng-Jui Tseng[2*]

[1,2]*Rattanakosin International College of Creative Entrepreneurship, Rajamangala University of Technology Rattanakosin, Thailand.*

*Corresponding author: Cheng-Jui Tseng (Email: juicheng.tseng@rmutr.ac.th)

ABSTRACT

Purpose: This study examines the impact of ESG strategies on the financial performance of international hotels in China.

Design/Methodology/Approach: Data was collected from 348 valid responses out of 353 surveyed hotels to analyze the relationships between ESG dimensions and financial performance.

Findings: The study reveals significant and complementary relationships among the environmental, social, and corporate governance dimensions of ESG in international hotels in China.

Conclusion: Implementing ESG strategies positively influences the financial performance of international hotels in China.

Research Limitations and Implications: Limitations include the focus on a specific region and the use of self-reported survey data. Future research should consider broader industry and geographical contexts as well as alternative data sources.

Practical Implications: The findings emphasize the value of ESG practices for hotel managers in improving financial outcomes.

Contribution to Literature: This study provides empirical evidence on the positive financial impact of ESG strategies in the hotel industry, specifically in the context of China, contributing to the existing literature on ESG and financial performance.

Keywords: *Chinese hotel ESG, ESG measurement, ESG strategies, Hotel performance, International hotel management, Sustainable management.*

1. INTRODUCTION

1.1. Background

The concept of Environmental, Social, and Governance (ESG) was initially introduced in a report by the United Nations "Who Cares Wins" in 2004. The report elaborated on the impact of ESG on a company's long-term financial performance and suggested using ESG as an indicator for evaluating business operations. The United Nations adopted the Millennium Development Goals in 2000 and the Sustainable Development Goals in 2015 and signed the Paris Agreement at the United Nations Climate Summit. A series of international initiatives have gradually raised awareness of ESG. The establishment of the Sustainability Accounting Standards Board (SASB) further highlights the importance of ESG performance for a company's long-term performance and value and gradually makes it an important language for companies to connect with the world (Su & Chen, 2020).

According to the World Business Council for Sustainable Development (WBCSD), corporate social responsibility is a commitment by companies to continue to adhere to ethical standards, promote economic development, and improve the quality of life for employees and their families, the entire community, and society as a whole. This article will focus on ESG, which can be used as an indicator of a company's health and stability.

However, why has ESG suddenly become a mainstream topic in the market? First, regulators and investors began to realize that financial reports cannot fully reflect the current state of a company's operations. Take China as an example. Past events such as food safety, waste management, or corporate governance have caused significant losses to investors and put pressure on regulators. However, these issues cannot be fully reflected in financial

Nurture*: Volume 17, Issue 3, 439-454,* ***2023***
Online ISSN*: 1994-1633/* ***Print ISSN****: 1994-1625*
DOI*: 10.55951/nurture.v17i3.366|* ***URL:*** www.nurture.org.pk

reports, and ESG can supplement this shortfall. Second, facing the increasing ESG risk threats, corporate operations are facing challenges from various levels, including information security risks in the early stages of digitalization, human rights risks that have been the focus of international society, and climate risks that have been highly valued in recent years. These risks are different from the market, business, and financial risks that companies have been paying more attention to in the past and require the establishment of a complete ESG risk management framework. Third, the market changes. In addition to the promotion and advocacy of the United Nations and global brand manufacturers, the market's emphasis on ESG continues to increase. Consumers no longer just buy goods or services but seek a sense of identity. In the past, purchasing behavior was mainly based on factors such as price, quality, and service. Now they are more concerned about whether companies have good ESG management and fulfill their responsibilities as social citizens. Therefore, under the above conditions, we can see that now, whether it is regulators, investment institutions, or consumer markets, everyone is talking about ESG and regards ESG management as a necessary condition for corporate sustainability.

As of May 2022, a total of 4,962 institutions worldwide have signed the Principles for Responsible Investment, including 1,022 from the United States, 834 from the United Kingdom, and 101 from China.

Despite the policy promotion and popularization of the concept, ESG companies in China are flourishing, with the number of companies increasing from 50 in 2020 to 83 in 2021, a year-on-year increase of 66%. This includes four asset owners, 17 third-party service providers, and 62 asset management institutions. However, compared to the global population and GDP (Gross Domestic Product), the number of signed institutions in China still lags behind in proportion.

Companies that prioritize ESG tend to have stronger resilience and recovery capabilities, which confirms the usefulness of ESG development for a company's sustainable survival (Drempetic, Klein, & Zwergel, 2020). ESG also emphasizes that social and environmental responsibilities cannot be neglected in addition to basic corporate operations. Investment is for improving society and the environment and promoting sustainable social development. Global warming, climate abnormalities and pollution, gender equality, and labor disputes are all part of ESG discussions. Despite the fact that the effect on businesses may not be evident in financial accounts, large businesses will gradually absorb and implement the feedback from the ultimate result, which is directly tied to everyone in society. Especially in the hotel industry, due to its high labor intensity and high localization degree, ESG has great benefits for hotel management in both social and corporate governance aspects (Su & Chen, 2020).

As of the end of 2021, there were 116 ESG-related public funds in China, with a total asset size of 137.167 billion yuan, an increase of 74.2% compared to the end of 2020. The number of A-share-listed companies disclosing ESG-related reports was 1,147, more than three times the 371 ESG-related reports disclosed in 2009. Despite the significant increase in quantity, the overall quality of ESG reports disclosed by existing listed hotels is still unsatisfactory. Some ESG reports disclosed by listed hotels still have characteristics of inadequate standardization and excessive promotional elements. The overall level of ESG information disclosure is still not satisfactory (Clark, Mauck, & Pruitt, 2021). Therefore, this study hopes to explore the impact of ESG on the operating performance of the hotel industry in China from the basic meaning of ESG.

1.2. Research Questions

As this study explores the operation of China's hotel industry from an ESG perspective, it will use the ESG dimensions and standards in the "2019 China Listed Company ESG Evaluation System" (Asset Management Association of China, 2019) as the basis and invite 10-15 hotel executives to answer the questionnaire through expert surveys. This study will use the AHP method to analyze the important aspects and standards, as well as their relative importance. Based on the results of the AHP method, this study designs a questionnaire for senior management in hotels to understand the relationship between ESG status and the operational performance of international hotels in China. Therefore, the research questions of this study are as follows:

1. What is the ESG status of the international hotels surveyed in China in this study?
2. From an ESG perspective, what is the sustainable management model for international hotels in China?

1.3. Research Objectives

Based on the research background and questions, the objectives of this study are as follows:

1. To understand the interrelationships between the ESG dimensions of the international hotels surveyed in China in this study.

Nurture**: Volume 17, Issue 3, 439-454, **2023
***Online ISSN**: 1994-1633/ **Print ISSN**: 1994-1625*
***DOI**: 10.55951/nurture.v17i3.366*| ***URL**:* www.nurture.org.pk

2. To examine the predictive effect of ESG on the operational performance of international hotels in China.

2. LITERATURE REVIEW

2.1. Sustainable Management

People now have more comfortable living conditions that satisfy their material needs thanks to the robust economic growth taking place in many nations throughout the world, which is being fueled by ongoing technological advancements and innovative research. While focusing on work efficiency, there is also an accompanying imbalance and stress between work and life. People are increasingly concerned with leisure travel or tourism needs, making the tourism industry one of the star industries of the 21st century. In addition, due to the drastic changes in the natural environment in recent years, the world is increasingly concerned about environmental protection issues, and the impact of environmental issues on the hotel industry has become increasingly profound. Moreover, in addition to attaching importance to the economic development and employment opportunities brought by the tourism industry, countries around the world are increasingly concerned with actively using natural and human resources to develop and maintain the natural ecological environment in order to achieve sustainable operations (Buallay, Fadel, Al-Ajmi, & Saudagaran, 2020).

The goal of sustainable management is to achieve environmental, social, and economic sustainability and to relate them to the decision-making process. Enterprises must contribute to society in their operations by at least using and wasting natural resources at a zero level, especially non-renewable resources. Enterprises should be able to cause minimal or no damage to the environment (Abbas, 2020). Sustainable management encourages companies to consider the long-term impact of their operations and decisions (Cai & Li, 2018), and there are many factors that motivate companies to follow sustainable development strategies, such as moral, legal, and business aspects. In addition, due to the increasing pressure from stakeholders, customer demands, and expectations, companies must allocate a certain proportion of resources to social and environmental development projects (Shahzad et al., 2020).

In order to maximize profits, industrial organizations are rapidly depleting natural resources to manufacture different products and provide services to customers. Compared to the service industry, the manufacturing industry consumes more natural resources and causes more environmental pollution, especially water and air pollution. This continuous process has led to a continuous rise in global temperature and a decrease in natural resources. Many people, including environmentalists and international organizations, have begun to speak out, raising awareness of ecological problems and the decline of natural resources, which has put great pressure on companies to follow sustainable development practices and take on more social responsibility (Cai & Li, 2018).

Under the pressure of stakeholders and fierce competition in the business market, organizations are forced to orient their operations towards sustainability, differentiation, and cost reduction. In this context, the resource-based view (RBV) of the organization emphasizes that a company's resources and capabilities are the bridge between sustainable development practices and performance (Barney, 1996). According to RBV, these characteristics are related to the conditions that enable companies to achieve sustainable growth and competitive advantage. These practices are equally important in the manufacturing and service industries (Hussain, Rigoni, & Orij, 2018).

Sustainable management aims to protect and manage resources and energy, especially those that are non-renewable and vital to maintaining life. Organizations cannot ignore their moral responsibility to the community, society, and the environment. Therefore, stakeholders, especially the government, public, and customers, expect them to participate in social and environmental improvement programs to offset the negative impact of their business operations (Asrar-ul-Haq, Kuchinke, & Iqbal, 2017). Organizations that take measures to protect the natural environment have a positive impact on customer and employee satisfaction. The environmental and social aspects of sustainable development are more theoretical and conceptual than economic sustainability, which has a financial nature. The social dimension of sustainability involves the ethical actions that organizations take for social welfare, prioritizing their economic and financial interests (Gorski, Fuciu, & Dumitrescu, 2017). For example, the financial and non-financial contributions of organizations to social development programs, such as donations to non-governmental organizations and participation in social awareness campaigns, include product and service quality and responsibility (Guerrero-Villegas, Sierra-García, & Palacios-Florencio, 2018). This dimension also considers the impact of organizational social activities on the social system, such as public policy, health and safety measures, and work practices (Ingenbleek & Dentoni, 2016).

2.2. ESG (Environmental, Social, and Governance)

The term ESG was first introduced in the United Nations' "Who Cares Wins" report in 2004. Today, it is used to identify and evaluate a company's comprehensive performance in management and operations. It is a more comprehensive and objective data analysis tool compared to past risk assessment items that focused only on financial accounting. ESG indicators encourage companies to pay attention to the value of intangible assets, sustainable development, and ongoing operations.

The following are some commonly monitored ESG aspects (Baraibar-Diez & Odriozola, 2019; Bartolacci, Caputo, & Soverchia, 2020; Su & Chen, 2020):

I. E (Environmental) Environmental Protection.

(1) Environment-related aspects: such as energy management, raw material management, product packaging, waste and pollutant reduction, land use, etc.

(2) Greenhouse gas emissions and climate change: such as greenhouse gas (GHG) emissions, climate change risks, etc.

(3) Environmental risks, such as compliance with environmental regulations.

(4) Environmental protection opportunities, such as environmental protection certification, etc.

II. S (Social) Social Responsibility.

(1) Suppliers: such as supplier management, etc.

(2) Customer interests, such as product quality management, customer information privacy and security, etc.

(3) Labor relations, such as labor relations, human rights protection, etc.

III. G (Governance) Corporate Governance.

(1) Corporate governance, such as business transparency, shareholder rights, board diversity and structure, business ethics, etc.

(2) Corporate behavior, such as compliance with corporate regulations, company audit report certificates, etc.

ESG indicators measure the decisions made by a company's management regarding operational efficiency and future strategic direction, providing insights into intangible assets such as brand value and reputation (Chevrollier, Zhang, van Leeuwen, & Nijhof, 2020). In recent years, ESG investing has gained attention in foreign investment circles, and more and more investors in China are becoming familiar with it. ESG represents a comprehensive social responsibility performance that includes a company's environmental sustainability, social participation, corporate governance, and focus on talent cultivation. The ESG framework is regarded by the Global Reporting Initiative (GRI) as a measure of a company's sustainable management performance. The ESG framework can be used to assess a company's sustainability, and the company's ESG performance can be examined through its sustainability report (Bartolacci et al., 2020).

In light of the above, sustainability will rewrite corporate operations and risk management and become the new operating rules of the market. While assessing ESG risks, companies can view them as opportunities and seek to integrate ESG into their existing business models, strategies, products, business models, and services, focusing on sustainable transformation to enhance corporate value. Corporate operations are no longer solely for shareholder interests but for creating long-term value for all stakeholders, moving towards the grand goal of corporate sustainable operations, and the concept of ESG is gradually being accepted and applied in the hotel industry (Su & Chen, 2020).

The United Nations introduced the Principles for Responsible Investment (PRI) in 2005, which included the ESG framework and integrated environmental protection, social responsibility, and corporate governance into investment proposals. The PRI also established six principles for socially responsible investment. ESG is commonly used in the capital market and has become a standard for measuring investment companies. Investment companies should not only focus on their financial performance but also evaluate how they manage the three risk factors of the environment, society, and corporate governance to avoid investment risks (Chen, Wang, Yu, Wu, & Zhang, 2021). ESG can be quantified, and internationally, ESG evaluation methods and applications represented by Morgan Stanley Capital International (MSCI), Dow Jones Sustainability Index (DJSI), Thomson Reuters Index, FTSE Russell Index, and others have been established. ESG has three aspects, but the underlying indicators in the design are different. The calculation is based on a weighted average, and indicators are assigned weights based on their respective methods and allocated and adjusted according to various industry conditions.

ESG data sources currently include MSCI (MSCI ESG Ratings aim to measure a company's resilience to long-term, financially relevant ESG risks.), KLD (KLD is based on proprietary research profiles of corporate environmental,

Nurture**: Volume 17, Issue 3, 439-454, **2023
***Online ISSN**: 1994-1633/ **Print ISSN**: 1994-1625*
***DOI**: 10.55951/nurture.v17i3.366| **URL**:* www.nurture.org.pk

social, and governance (ESG) factors.), Refinitiv Assets 4, Sustainalytics, Vigeo Eiris, CDP (Carbon Disclosure Project), BloombESG, and more (Su & Chen, 2020). Taking MSCI ESG as an example, MSCI ESG ratings can help investors understand ESG risks and opportunities and incorporate ESG factors into portfolio construction and management. MSCI analyzes 37 ESG key issues of the invested companies, focusing on the interaction between the core business and the ESG key issues of the industry, which brings risks and opportunities. ESG scores and ratings are mainly used to measure the company's ESG performance in its industry and adjust risks and opportunities based on the performance and achievements of industry peers. MSCI evaluates a company's ESG rating from the best AAA level to the worst CCC level, with seven levels.

Due to the inherent characteristics of the hotel industry compared with non-hotel industries, the financial performance of hotel enterprises is more sensitive to additional or exclusionary events, regardless of short-term or long-term measurements (Su & Chen, 2020).

Since the joint release of the "Guiding Opinions on Building a Green Financial System" by seven ministries and financial regulatory agencies in 2016, green finance and investment have become important pillars of China's economic transformation. With China's per capita GDP exceeding 10,000 US dollars, people are increasingly concerned about how to obtain cleaner air and safer products to improve their quality of life. In addition, Chinese regulatory agencies, investors, and the public are increasingly demanding strict regulation and accountability for corporate fraud or irresponsible business practices (Asset Management Association of China, 2019).

The two main driving factors supporting responsible investment and ESG integration include:

I. Policy: Policymakers and regulatory agencies drive a top-down policy framework through the financial system to support green growth.

II. Globalization: China's investment market continues to open up, and international investors are increasingly concerned about ESG factors that affect the performance of Chinese enterprises and related economic risks and outcomes.

The Asset Management Association of China (2019) referred to ESG evaluation indicators formulated by many Western institutions and integrated Chinese economic and social characteristics to propose ESG evaluation indicators with Chinese characteristics. This study will construct a hierarchical model based on these indicators and survey hotel executives through expert questionnaires to understand the importance of the three dimensions (standards) of ESG and their sub-dimensions (standards) in the international hotel industry in China.

2.3. Hotel Performance

Performance is primarily used to measure the degree to which an organization achieves its goals and is also a tool for evaluating whether a business maximizes shareholder value. Organizational performance is the cumulative result of all the work processes and activities within an organization. Organizational performance is an indicator of how well a business achieves its predetermined objectives and its level of satisfaction with business outcomes throughout its entire operation (Robbins & Coulter, 2002).

In the past, there have been different opinions on whether corporate performance or hotel performance should be used as a measure. Whether using secondary data as a benchmark or subjective measurement through surveys, past studies have used different standards and positions.

Richard and Johnson (2001) conducted research on the impact of human resource measures on bank performance in California and Kentucky. The standards used in this study were employee turnover rate, employee productivity, and shareholder equity return rate. The source of these indicators was the third-party database Sheshunoff Bank Search, to avoid the possibility of internal fraud. This study measured employee productivity, which is the natural logarithm of the value output per employee. The performance measurement standards used in this study are also a kind of "objective indicator" method.

Ghebregiorgis and Karsten (2007) conducted a study on the impact of human resource measures implemented in public and private enterprises in Eritrea on business performance. The study utilized performance indicators such as employee turnover rate, employee absenteeism rate, number of employee complaints, and employee productivity. These indicators were derived from internal company records, with employee productivity being assessed through the natural logarithm of sales per employee. The study measured performance using an "objective measure" approach.

Gunday, Ulusoy, Kilic, and Alpkan (2011) investigated the impact of innovation categories on business performance. The study examined 184 manufacturing companies in Turkey. The performance measurement method used in the study was "subjective measurement," measured through a questionnaire survey. The researchers asked respondents about their perceptions of the company's return on investment, return on assets, profitability, and cash flow usage, excluding investment. The testers used the past three years as the baseline, comparing the company's performance three years ago and using the Likert five-point scale as the measurement standard to judge business performance.

Moideenkutty, Al-Lamki, and Sree Rama Murthy (2011) studied the impact of human resource measures on business performance in 73 listed companies and 14 closed holding companies in Oman using a questionnaire survey, also known as "subjective measurement," allowing respondents to evaluate business performance through questionnaire design. Amin, Khairuzzaman, Zaleha, and Daverson (2014) investigated the relationship between human resource measures implemented in Malaysian universities and school performance. The method of evaluating school performance in the study was also "subjective measurement," using a questionnaire as the evaluation tool, allowing students, administrators, and teachers to evaluate school performance.

This study uses a "subjective measurement" approach to measure hotel performance. The advantage of "subjective measurement" is that it allows employees to evaluate hotel performance themselves and compare it with other hotels in the same industry. Through a questionnaire survey, employees are able to express their perceptions of hotel performance. Therefore, this study uses "subjective measurement" as the method of measuring hotel performance. Based on the studies of Gunday et al. (2011) and Luo et al. (2022), this study uses four dimensions (public reputation, sales growth rate, service quality, and employee productivity) to measure hotel performance.

3. RESEARCH METHODS

To achieve the research objectives, this study will conduct three papers. This chapter outlines how this study will address the research questions and describes the specific contents of the three papers.

3.1. Research Model

Khan (2022) attempted to comprehensively study the ESG's performance and its impact on performance through bibliometric analysis and meta-analysis. The bibliometric analysis highlighted top scholars, leading journals, institutions, countries, and an overview of highly cited articles in the field of sustainable finance. Khan (2022) proposed three research streams: (1) company characteristics and ESG performance; (2) corporate governance and ESG performance; and (3) financial materiality of ESG disclosure. Additionally, he conducted a meta-analysis and calculated the effect size of each research stream using a random-effects model.

Therefore, this study constructs the following research model: Figure 1 illustrates this paper's framework, and Figure 2 illustrates the ESG level model of China international hotel.

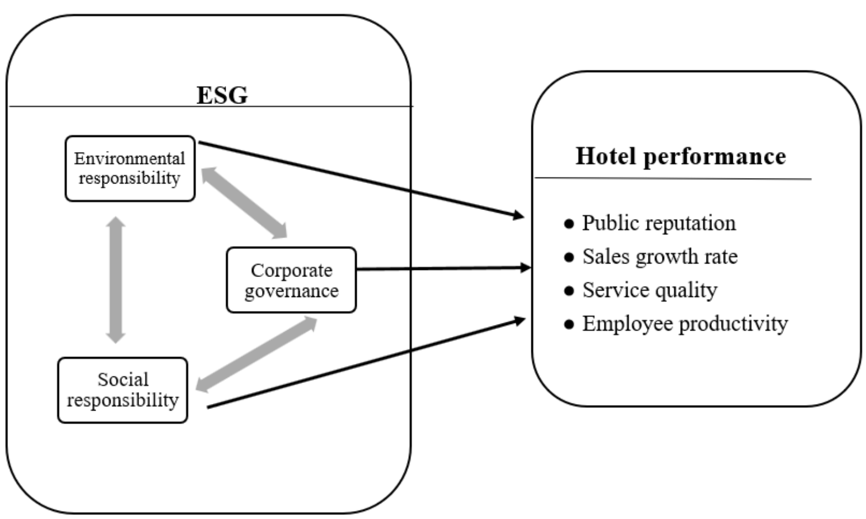

Figure 1. Research framework.

Nurture: *Volume 17, Issue 3, 439-454,* ***2023***
Online ISSN: *1994-1633/* ***Print ISSN***: *1994-1625*
DOI: *10.55951/nurture.v17i3.366*| ***URL***: www.nurture.org.pk

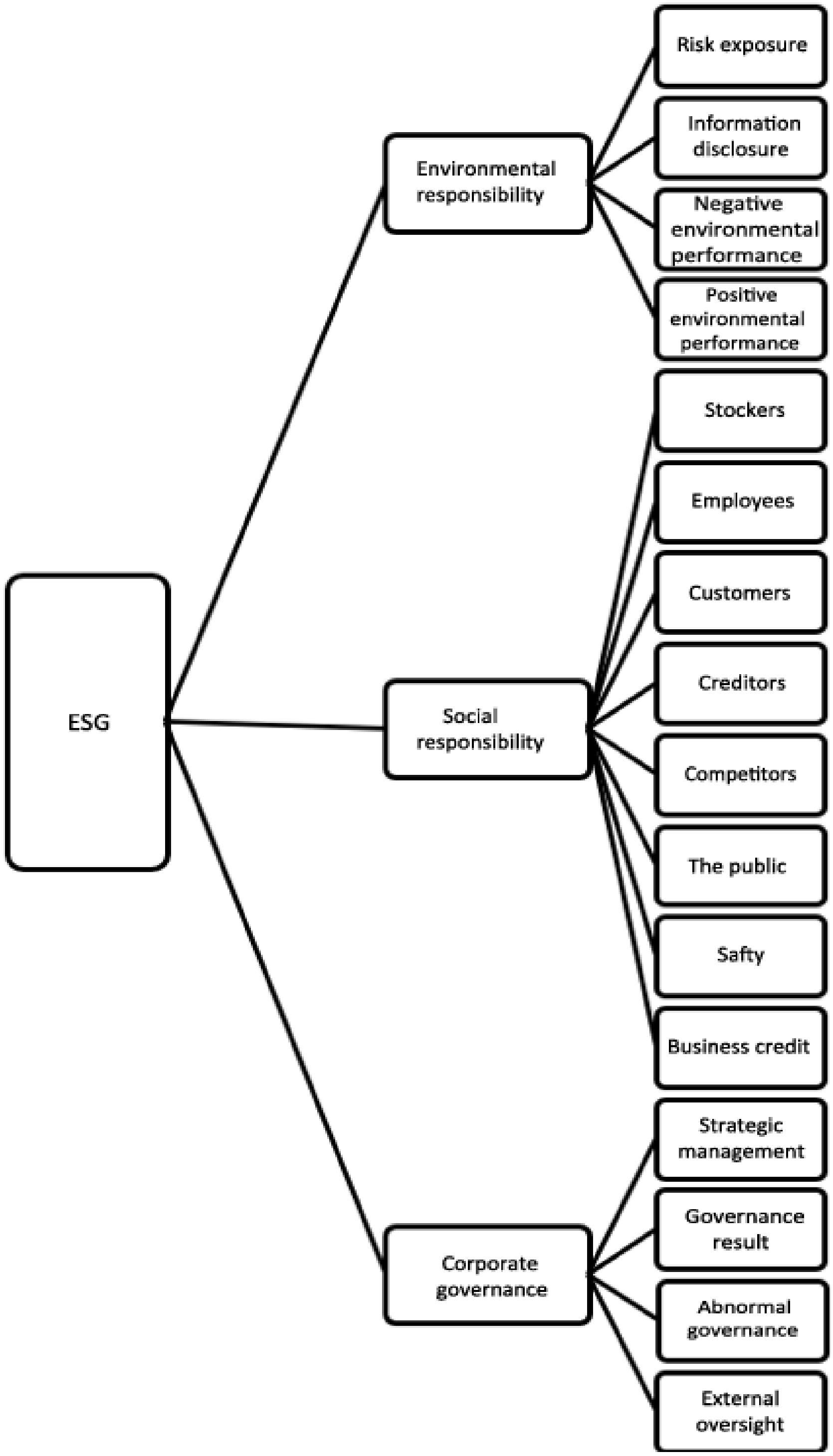

Figure 2. ESG level model of China international hotel.

3.2. Research Hypothesis

3.2.1. The Relationship Between the Three Dimensions of ESG in the China International Hotel

Su and Chen (2020) pointed out that the interaction of environment, society, and governance paves the way for the development of new social responsibility investment strategies and ESG-oriented practices, which help to enhance the financial performance of tourism-related companies and have a positive impact on society.

Nurture: *Volume 17, Issue 3, 439-454,* ***2023***
Online ISSN: *1994-1633/* ***Print ISSN***: *1994-1625*
DOI: *10.55951/nurture.v17i3.366|* ***URL***: www.nurture.org.pk

Yang, Du, Razzaq, and Shang (2022) used a panel estimator to consider the sustainable development goals and practices in seven different industries of the G7 economies between 2010 and 2018. Sustainable practices were measured through the environmental, social, and governance (ESG) pillars during the research period. Even after controlling for the impact of environmental regulations, economic growth, and foreign investment, this connection remained consistent. These findings have significant implications for related industries, governments of G7 economies, environmental activists, and other stakeholders.
Based on the above research, as shown in Figure 3, there should be a significant relationship between environmental responsibility, social responsibility, and corporate governance.

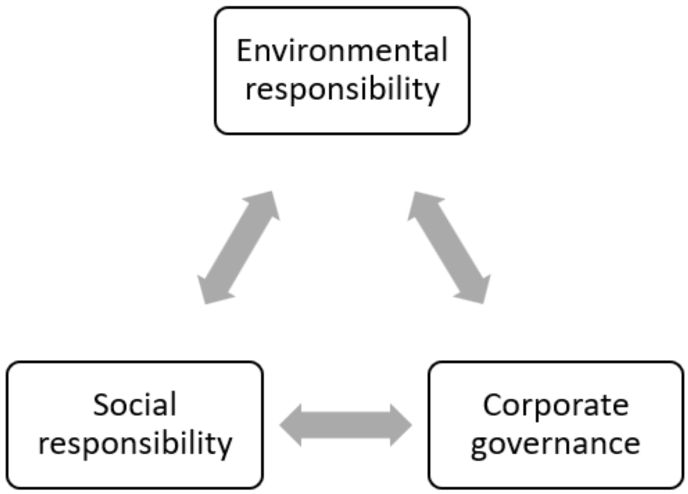

Figure 3. Conceptual diagram of ESG interrelationships.

Based on past literature and research models, the following hypotheses can be established:
H1: There is a significant positive relationship between environmental responsibility and social responsibility in China International Hotels.
H2: There is a significant positive relationship between environmental responsibility and corporate governance in China International Hotels.
H3: There is a significant positive relationship between social responsibility and corporate governance in China International Hotels.

3.2.2. Relationship between ESG and Performance in China International Hotels
Su and Chen (2020) used the Dow Jones Sustainability North America Index (DJSI) as a proxy for corporate social responsibility investment and analyzed the short-term and long-term effects of DJSI on the financial value of hotel companies. The results showed that due to the intrinsic characteristics of the hotel industry, the financial performance of hotel companies was more sensitive to addition or deletion events, and compared with non-hotel companies, the performance was more sensitive in both short-term and long-term measurements.
Bruna, Loprevite, Raucci, Ricca, and Rupo (2022) used a time-lagged panel regression model to investigate the impact of environmental, social, and corporate governance (ESG) performance on financial performance. This study aimed to overcome the ambiguity of previous research and the inaccurate methodology that has repeatedly occurred, thus supporting a comprehensive indicator for the two dimensions. By using a sample of 350 European listed companies observed from 2014 to 2019, their research results supported the non-linear relationship and confirmed its sensitivity to ESG performance and company size factors. Furthermore, they provided evidence of the positive and significant impact of ESG performance on financial performance when implementing mandatory non-financial disclosure systems.
Based on the above research, as shown in Figure 4, ESG should have a significant positive predictive ability for the performance of China International Hotels.

Nurture**: Volume 17, Issue 3, 439-454, **2023
***Online ISSN**: 1994-1633/ **Print ISSN**: 1994-1625*
***DOI**: 10.55951/nurture.v17i3.366| **URL**: www.nurture.org.pk*

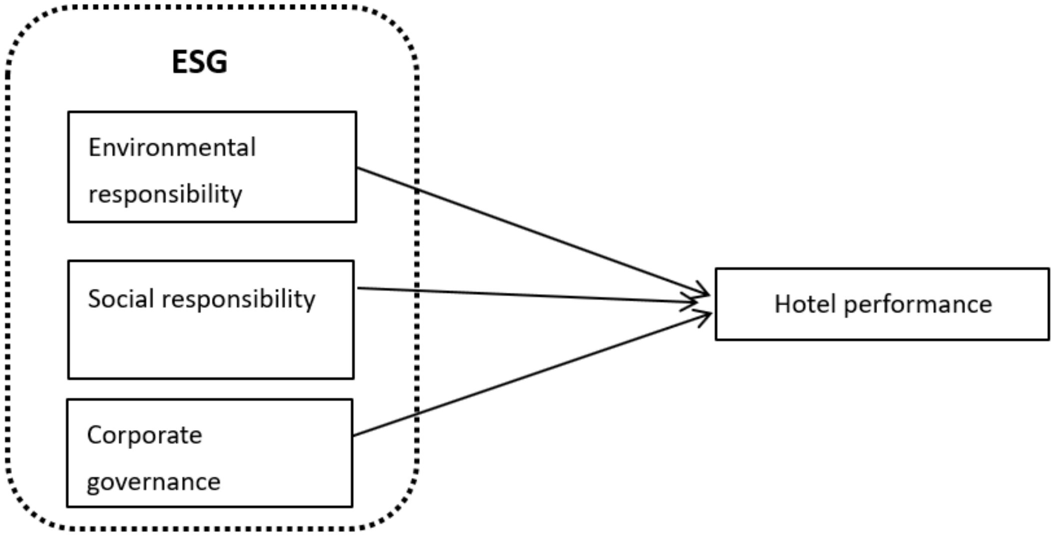

Figure 4. Relationship between ESG and hotel performance.

Based on past literature and research models, the following hypotheses can be established:
H4: Environmental responsibility has a significant positive predictive ability for the operational performance of the international hotel industry in China.
H5: Social responsibility has a significant positive predictive ability for the operational performance of the international hotel industry in China.
H6: Corporate governance has a significant positive predictive ability for the operational performance of the international hotel industry in China.
H7: ESG has a significant positive predictive ability for the operational performance of the international hotel industry in China.

3.3. Questionnaire and Measurement

The questionnaire is designed to collect feedback on the interrelationships between environmental responsibility (E), social responsibility (S), and corporate governance (G) of international hotels in China. Since the participants are all Chinese, the questionnaire is written in Chinese to ensure their understanding. This questionnaire consists of three parts: background information, ESG (16 items), and the operational performance of international hotels, which is measured using a four-item scale. The measurement method uses a 6-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree).
Most of the questionnaire content is adapted and modified from relevant research. The following will show the sources and details of the measurement tools.
Table 1 to Table 4 present the measurement items of environmental responsibility, social responsibility, corporate governance, and hotel performance.

3.3.1. Measurement tools

(1) Environmental Responsibility (E)
Environmental responsibility is composed of four questions, measured on a 5-point scale, with scores ranging from 1 (strongly disagree) to 5 (strongly agree).

Nurture**: Volume 17, Issue 3, 439-454, **2023
***Online ISSN**: 1994-1633/ **Print ISSN**: 1994-1625*
***DOI**: 10.55951/nurture.v17i3.366| **URL**: www.nurture.org.pk*

Table 1. Survey items for environmental responsibility (E).

Factor	Measurement items	Source
Environmental responsibility(E)	1. Your hotel's overall environmental risk exposure is better than its peers.	Asset Management Association of China (2019)
	2. Your hotel's level of environmental information disclosure is better than its peers.	
	3. Your hotel's negative environmental performance is higher than its peers.	
	4. Your hotel's level of positive environmental performance is better than its peers.	

(2) Social responsibility (S)
Social responsibility is constructed and measured using an 8-item scale using a 5-point Likert scale ranging from 1 (strongly disagree) to 6 (Strongly agree).

Table 2. Survey items for social responsibility (S).

Factor	Measurement items	Source
Social responsibility(S)	1. Your hotel is more responsible to shareholders than its peers.	Asset Management Association of China (2019)
	2. Your hotel is more responsible for its employees than its peers.	
	3. Your hotel is more responsible toward customers than its peers.	
	4. Your hotel is more responsible toward creditors than its peers.	
	5. Your hotel competes fairly with its peers.	
	6. Your hotel's responsibility to the public is better than its peers.	
	7. Your hotel's attention to safety in all aspects is better than its peers.	
	8. Your hotel pays more attention to business credit than its peers.	

(3) Corporate Governance (G)
Corporate governance is measured using four items, assessed using a 5-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Table 3. Survey items for corporate governance (G).

Factor	Measurement items	Source
Corporate governance(G)	1. Your hotel's strategic management is better than its peers.	Asset Management Association of China (2019)
	2. Your hotel's governance results are better than those of its peers.	
	3. Your hotel's abnormal governance is less than that of its peers.	
	4. Your hotel's external oversight is better than its peers.	

(4) International Hotel Performance
International Hotel Performance is measured using four items, assessed using a 5-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Table 4. Survey items for international hotel performance.

Factor	Measurement items	Source
International hotel performance	1. Your hotel's public image and reputation are better than those of its peers.	Gunday et al. (2011) and Luo et al. (2022)
	2. Your hotel's growth rate in sales and revenues is better than its peers.	
	3. Your hotel's service quality is better than its peers.	
	4. Your hotel's employee productivity is better than its peers.	

Nurture**: Volume 17, Issue 3, 439-454, **2023
***Online ISSN**: 1994-1633/ **Print ISSN**: 1994-1625*
***DOI**: 10.55951/nurture.v17i3.366| **URL**: www.nurture.org.pk*

3.3.2. Participants

The participants in this study were middle and senior-level managers from international hotels in the Shenzhen area. The selection criteria were based on their job positions. It was expected to recruit more than 300 managers to participate in this study and collect over 300 valid questionnaires to complete all stages of the research.

4. RESULTS

This chapter presents the analysis and results of the collected questionnaires and verifies the research hypotheses. The results are divided into four sections. Section 1 describes the sampling process and basic sample characteristics, including descriptive statistics of the sample distribution. Section 2 presents the sampling error test to ensure that there is no sampling bias in the questionnaire collection and to explore the respondents' basic attitudes towards the research constructs. Section 3 analyzes the reliability and validity of the study using Cronbach's alpha coefficient analysis and exploratory factor analysis. Section 4 conducts multiple regression analyses to verify the research hypotheses based on the research model.

The main focus of this study is to explore the relationship between ESG strategies and performance in Chinese international hotels. The questionnaires were distributed through an online survey to senior executives of Chinese international hotels. Convenience sampling was used for the online survey. During the first round of data collection, 227 responses were received. Two weeks later, a second round of online surveys was conducted, and 116 responses were received. In total, 353 responses were collected during the two rounds. However, some of the responses were deemed invalid due to inconsistent answers or incomplete responses and were excluded from the analysis, resulting in a total of 348 valid responses. The response rate was 98.58%. The descriptive statistics of the sample are presented in Table 5.

Table 5. The descriptive statistics of the sample.

Variable	Frequency distribution	Percentage%
Hotel location		
Nanjing	117	33.6%
Wuhan	98	28.2%
Shenzhen	122	35.1%
Other	11	3.2%
Hotel annual revenue		
Less than 20 million	41	11.8%
20 Million to 40 million	90	25.9%
40 Million to 60 million	94	27.0%
60 Million to 80 million	75	21.6%
More than 80 million	48	13.8%
Hotel employee number		
Less than 100	38	10.9%
100 to 200	108	31.0%
200 to 300	132	37.9%
More than 300	70	20.1%
Hotel years in operation		
Less than 3 years	18	5.2%
3 Years to 5 years	117	33.6%
5 Years to 8 years	146	42.0%
More than 8 years	67	19.3%

In this study, after using factor analysis to streamline the questionnaire items for each construct, the remaining questions were subjected to descriptive statistical analysis to further explore the respondents' basic attitudes towards the research constructs, as shown in Table 6.

Nurture: *Volume 17, Issue 3, 439-454,* ***2023***
Online ISSN: *1994-1633/* ***Print ISSN***: *1994-1625*
DOI: *10.55951/nurture.v17i3.366*| ***URL***: www.nurture.org.pk

Table 6. Descriptive statistics of each construct.

Construct	Question items	Mean	Standard deviation
ESG evaluation environmental issues	1. Your hotel's overall environmental risk exposure is better than competitors'.	3.36	1.069
	2. Your hotel's level of environmental information disclosure is better than competitors.	3.61	1.083
	3. Your hotel's negative environmental performance is higher than competitors.	3.97	1.104
	4. Your hotel's positive environmental performance is better than competitors.	4.15	1.037
ESG evaluation social issues	1. Your hotel has a greater sense of responsibility towards shareholders than competitors.	4.20	0.992
	2. Your hotel has a greater sense of responsibility towards employees than competitors.	4.25	0.978
	3. Your hotel has a greater sense of responsibility toward customers than competitors.	4.31	0.967
	4. Your hotel has a greater sense of responsibility towards creditors than competitors.	4.28	0.965
	5. Your hotel competes fairly with its industry peers.	4.31	0.994
	6. Your hotel has a greater sense of responsibility towards the general public than its competitors.	4.33	0.938
	7. Your hotel places a greater emphasis on safety than its competitors.	4.32	0.976
	8. Your hotel places a greater emphasis on corporate creditworthiness than competitors.	4.37	0.934
ESG evaluation governance issues	1. Your hotel's strategic management is better than competitors.	4.26	0.919
	2. Your hotel's corporate governance outcomes are better than competitors.	4.28	0.941
	3. Your hotel experiences fewer corporate governance anomalies than competitors.	4.21	0.986
	4. Your hotel is subject to better external oversight than competitors.	4.27	0.977
Hotel performance	1. Your hotel is subject to better external oversight than competitors.	4.12	0.919
	2. Compared to competitors, your hotel has good revenue growth.	4.14	0.941
	3. Compared to competitors, your hotel provides high-quality services.	4.18	0.986
	4. Compared to competitors, your hotel has high employee productivity.	4.18	0.977

From the above descriptive statistics, it was found that in the ESG rating's environmental dimension, except for item 4, "Your hotel's positive environmental performance level exceeds the industry average," which had a mean of 4.15, the mean of other items ranged from 3.36 to 3.97. This indicates that there is still a lot of room for improvement in the hotel's investment and efforts on environmental issues. Overall, in the social dimension, the mean scores were all above 4.00, indicating that the surveyed companies' performance in social aspects is acceptable, but there is still room for improvement. In terms of corporate governance, the mean scores were all above 4.00, indicating that the surveyed companies' investment and efforts in corporate governance are good. Finally, in the corporate performance dimension, the mean scores were all above 4.00, indicating that the surveyed companies' performance in corporate performance has reached a certain level.

In this study, Cronbach's α coefficient analysis was conducted on the collected data to measure whether the responses in each dimension had homogeneity. The higher the Cronbach's α value, the higher the homogeneity, which means that the respondents' answers are more internally consistent. A Cronbach's α value greater than 0.7 is considered acceptable reliability for each dimension. The reliability analysis results for each dimension in this study are shown in Table 7. The Cronbach's α values of each dimension met the standard of Cronbach's α > 0.7, indicating that the measurement variables of all variables in this study have high internal consistency, which means they have a considerable level of reliability.

Table 7. Reliability analysis of each construct.

Construct	Measured items	Cronbach's α
ESG rating: Environmental issues	4	0.734
ESG rating: Social issues	8	0.971
ESG rating: Governance issues	4	0.922
Corporate performance	4	0.950

This study used Pearson's product-moment correlation method to calculate the correlation coefficients between each construct in the analysis of the collected data. The correlation coefficients between each construct are shown in Table 8.

Table 8. Correlation analysis of each construct.

Constructs	Environmental	Social	Governance	Performance
Environmental	-			
Social	0.311**	-		
Governance	0.323**	0.900**	-	
Performance	0.382**	0.604**	0.595**	-
Mean	3.775	4.297	4.255	4.154
Standard deviation	0.800	0.882	0.861	0.950

Note: P < 0.01**, the main diagonal shows the square root of AVE values. 0.824

This study adopted multiple regression analysis to examine the relationship between ESG strategies and performance and included control variables in the analysis. The results are as follows:

(1) ESG Strategy: Relationship between Environmental Factors and Performance

From the F-value in Model 2 in Table 9, the total test effect reached a significant level (P<0.001), indicating that the regression model was significant with an adjusted explanatory variation of 46.1%. The results of Model 2 in Table 9 showed that the relationship between ESG strategy, environmental factors, and performance had a significant positive impact (β= 0.138***, P<0.01). Therefore, H1 is supported.

(2) ESG Strategy: Relationship between Social Factors and Performance

From the F-value in Model 2 in Table 9, the total test effect reached a significant level (P<0.001), indicating that the regression model was significant with an adjusted explanatory variation of 46.1%. The empirical results are described below in sequence. From the results of Model 2 in Table 9, the relationship between ESG strategy-social factors and performance had a significant positive impact (β= 0.259**, P<0.01). Therefore, H2 is supported.

(3) ESG Strategy: Relationship between Governance Factors and Performance

From the F-value in Model 2 in Table 9, the total test effect reached a significant level (P<0.001), indicating that the regression model was significant with an adjusted explanatory variation of 46.1%. The empirical results are described below in sequence. From the results of Model 1 in Table 9, the relationship between ESG strategy-governance factors and performance had a significant positive impact (β= 0.214**, P<0.01). Therefore, H3 is supported.

Table 9. Regression analysis of ESG strategies on corporate performance.

Variables	Dependent variable: Corporate performance	
	Model 1	Model 2
Control variables		
Firm size	0.504***	0.258***
Independent variables		
ESG strategy: Environmental		0.138**
ESG strategy: Social		0.259**
ESG strategy: Governance		0.214**
F value	117.821	75.050
R^2	0.254	0.467
Adj R^2	0.252	0.461
Durbin–Watson value	1.991	

Note: <0.05, P<0.01**, P<0.001***.

5. CONCLUSION AND RECOMMENDATIONS

5.1. Theoretical and Practical Implications

Firstly, this study provides theoretical evidence for the significant positive relationship between the three dimensions of ESG, which is consistent with past research indicating that ESG is increasingly important for businesses and that the three dimensions are interrelated (Su & Chen, 2020). Additionally, this study examines whether the ESG strategies of Chinese companies have an impact on their financial performance. The results show that ESG strategies in the environmental, social, and governance dimensions all have a positive effect on the operating performance of international hotels in China. This differs from Bruna et al. (2022) finding of a non-linear relationship, which may be due to the longer business tenure of the hotel sample in this study.

From a practical perspective, this study provides a policy understanding of ESG strategy implementation for international hotels in different regions of China. It enables hotel operators to recognize that implementing ESG strategies is not just about compliance but can actually help improve financial performance.

5.2. Research Limitations

Although this study has made every effort to be comprehensive, there is still limited information on the relationship between ESG, sustainable management, and international hotel performance. Examples of such limitations include:

(1) The research sample consists of managers of international hotels in China, which may limit the generalizability of the results to other countries or regions.

(2) The impact of ESG strategies on financial performance may vary across different industries, and thus exploring ESG strategies in different industries is worth further investigation.

(3) The survey method used in this study is not considered flawless. The participants were purposively selected, which may result in negative or biased results. Additionally, the study design issues need to be emphasized, which also limit our interpretation.

FUNDING

This study received no specific financial support.

INSTITUTIONAL REVIEW BOARD STATEMENT

The Ethical Committee of the Wuhan University of Communication, China has granted approval for this study (Ref. No. 06/2023). Xueyan Ding is a full-time lecturer at Wuhan Communication University who is also enrolled in the Rattanakosin International College of Creative Entrepreneurship at the Rajamangala University of Technology Rattanakosin in Thailand to complete her doctoral studies.

DATA AVAILABILITY STATEMENT

The corresponding author may provide study data upon reasonable request.

CONFLICT OF INTEREST

The authors declare that they have no competing interests.

ARTICLE HISTORY
Received: 9 May 2023/ Revised: 29 June 2023/ Accepted: 10 July 2023/ Published: 24 July 2023

AUTHORS' CONTRIBUTIONS
Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

REFERENCES

Abbas, J. (2020). Impact of total quality management on corporate sustainability through the mediating effect of knowledge management. *Journal of Cleaner Production, 244*, 118806. https://doi.org/10.1016/j.jclepro.2019.118806

Amin, M., Khairuzzaman, W. I. W., Zaleha, A. R. S., & Daverson, A. S. R. (2014). The impact of human resource management practices on performance: Evidence from a public university. *The TQM Journal, 26*(2), 125-142. https://doi.org/10.1108/tqm-10-2011-0062

Asrar-ul-Haq, M., Kuchinke, K. P., & Iqbal, A. (2017). The relationship between corporate social responsibility, job satisfaction, and organizational commitment: Case of Pakistani higher education. *Journal of Cleaner Production, 142*, 2352-2363. https://doi.org/10.1016/j.jclepro.2016.11.040

Asset Management Association of China. (2019). *Research report on the ESG evaluation system of Chinese listed company*. Retrieved from http://cn.afca-asia.org/Portal.do?method=indexView

Baraibar-Diez, E., & Odriozola, D. M. (2019). CSR committees and their effect on ESG performance in UK, France, Germany, and Spain. *Sustainability, 11*(18), 5077. https://doi.org/10.3390/su11185077

Barney, J. B. (1996). The resource-based theory of the firm. *Organization Science, 7*(5), 469-469.

Bartolacci, F., Caputo, A., & Soverchia, M. (2020). Sustainability and financial performance of small and medium sized enterprises: A bibliometric and systematic literature review. *Business Strategy and the Environment, 29*(3), 1297-1309. https://doi.org/10.1002/bse.2434

Bruna, M. G., Loprevite, S., Raucci, D., Ricca, B., & Rupo, D. (2022). Investigating the marginal impact of ESG results on corporate financial performance. *Finance Research Letters, 47*, 102828. https://doi.org/10.1016/j.frl.2022.102828

Buallay, A., Fadel, S. M., Al-Ajmi, J. Y., & Saudagaran, S. (2020). Sustainability reporting and performance of MENA banks: Is there a trade-off? *Measuring Business Excellence, 24*(2), 197–221. https://doi.org/10.1108/MBE-09-2018-0078

Cai, W., & Li, G. (2018). The drivers of eco-innovation and its impact on performance: Evidence from China. *Journal of Cleaner Production, 176*, 110-118. https://doi.org/10.1016/j.jclepro.2017.12.109

Chen, K., Wang, J., Yu, B., Wu, H., & Zhang, J. (2021). Critical evaluation of construction and demolition waste and associated environmental impacts: A scientometric analysis. *Journal of Cleaner Production, 287*, 125071. https://doi.org/10.1016/j.jclepro.2020.125071

Chevrollier, N., Zhang, J., van Leeuwen, T., & Nijhof, A. (2020). The predictive value of strategic orientation for ESG performance over time. *Corporate Governance: The International Journal of Business in Society, 20*(1), 123-142. https://doi.org/10.1108/CG-03-2019-0105

Clark, J., Mauck, N., & Pruitt, S. W. (2021). The financial impact of COVID-19: Evidence from an event study of global hospitality firms. *Research in International Business and Finance, 58*, 101452. https://doi.org/10.1016/j.ribaf.2021.101452

Drempetic, S., Klein, C., & Zwergel, B. (2020). The influence of firm size on the ESG score: Corporate sustainability ratings under review. *Journal of Business Ethics, 167*(2), 333-360. https://doi.org/10.1007/s10551-019-04164-1

Ghebregiorgis, F., & Karsten, L. (2007). Human resource management and performance in a developing country: The case of Eritrea. *The International Journal of Human Resource Management, 18*(2), 321-332. https://doi.org/10.1080/09585190601102547

Gorski, H., Fuciu, M., & Dumitrescu, L. (2017). *Sustainability and corporate social responsibility (CSR): Essential topics for business education*. Paper presented at the Balkan Region Conference on Engineering and Business Education.

Guerrero-Villegas, J., Sierra-García, L., & Palacios-Florencio, B. (2018). The role of sustainable development and innovation on firm performance. *Corporate Social Responsibility and Environmental Management, 25*(6), 1350-1362. https://doi.org/10.1002/csr.1644

Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics, 133*(2), 662-676.

Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics, 149*(2), 411-432. https://doi.org/10.1007/s10551-016-3099-5

Ingenbleek, P. T., & Dentoni, D. (2016). Learning from stakeholder pressure and embeddedness: The roles of absorptive capacity in the corporate social responsibility of Dutch agribusinesses. *Sustainability, 8*(10), 1026. https://doi.org/10.3390/su8101026

Khan, M. A. (2022). ESG disclosure and firm performance: A bibliometric and meta analysis. *Research in International Business and Finance, 61*, 101668. https://doi.org/10.1016/j.ribaf.2022.101668

Luo, C.-Y., Tsai, C.-H. K., Su, C.-H. J., Kim, H. J., Gao, J.-L., & Chen, M.-H. (2022). How does hotel employees' psychological capital promote adaptive performance? The role of change readiness. *Journal of Hospitality and Tourism Management, 51*, 491-501. https://doi.org/10.1016/j.jhtm.2022.05.006

Moideenkutty, U., Al-Lamki, A., & Sree Rama Murthy, Y. (2011). HRM practices and organizational performance in Oman. *Personnel Review, 40*(2), 239-251. https://doi.org/10.1108/00483481111106101

Richard, O. C., & Johnson, N. B. (2001). Strategic human resource management effectiveness and firm performance. *International Journal of Human Resource Management, 12*(2), 299-310. https://doi.org/10.1080/09585190121674

Robbins, S. P., & Coulter, M. K. (2002). *Management*. Upper Saddle River, NJ: Prentice Hall.

Shahzad, M., Qu, Y., Ur Rehman, S., Zafar, A. U., Ding, X., & Abbas, J. (2020). Impact of knowledge absorptive capacity on corporate sustainability with mediating role of CSR: Analysis from the Asian context. *Journal of Environmental Planning and Management, 63*(2), 148-174. https://doi.org/10.1080/09640568.2019.1575799

Su, C.-H. J., & Chen, C.-D. (2020). Does sustainability index matter to the hospitality industry? *Tourism Management, 81*, 104158. https://doi.org/10.1016/j.tourman.2020.104158

Yang, Q., Du, Q., Razzaq, A., & Shang, Y. (2022). How volatility in green financing, clean energy, and green economic practices derive sustainable performance through ESG indicators? A sectoral study of G7 countries. *Resources Policy, 75*, 102526. https://doi.org/10.1016/j.resourpol.2021.102526