A Study of the Financial Performance of Sustainable Hospitality Companies

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Abstract
To meet the ever-evolving requirements of society, businesses are increasingly taking measures to reduce the adverse effects on society and the environment. The world of finance and the stock market have consistently recognized companies that have emerged as sustainable, and they have even established sustainable indexes to elevate sustainable businesses to a higher level of importance. The purpose of this study is to analyze the financial and economic performance of hospitality firms listed on regulated and active stock exchanges in the Asia Pacific, Eastern Europe, Latin America and the Caribbean, the Middle East and Africa, North America, and Western Europe. It was through the utilization of the Global Industry Classification Standard that the enterprises were recognized. Bloomberg's ESG score was used to rate corporations based on their level of sustainability. The Bloomberg Terminal was used to collect both the financial and environmental, social, and governance (ESG) data, and IBM SPSS Statistics 27 was utilized for the statistical analysis. Additionally, a portfolio was created with equal weighting for each group of companies to illustrate the market performance of each group. According to the study's analysis, there is a lack of consensus regarding the relationship between financial measures of profitability and liquidity. Moreover, the market performance also indicates that financial ratios do not always correlate with better financial performance in the capital markets. The research contributes to the body of knowledge in the field of sustainability and finance by utilizing a different methodology than similar studies have used, incorporating different accounting ratios and new statistical analyses of data from a global sample.

Keywords
ESG; Finance; Hospitality; Capital Markets; Sustainability.

Introduction

Recent years have revealed clear evidence of human impact on the environment, resulting in increased attention to environmental challenges for the sustainable development of society (IPCC, 2021). Consequently, non-governmental organizations, communities, governments, media, and other institutional entities have escalated pressure on corporations to formulate and implement socially responsible practices Zaremba et al., 2023) and to contemplate objectives that transcend shareholders' financial interests (UN Global Compact, 2019). Thus, incorporating these practices and initiatives has emerged as a vital factor for corporations addressing societal needs (Deloitte, 2022).

Given this context, companies are questioning the financial viability of sustainability efforts. Atz et al. (2021) asserted that, throughout the past few decades, researchers have endeavored to conceptualize and ascertain the correlation between social performance and financial performance in business. Despite the publication of multiple empirical research examining this association, the results remain inconclusive (Henisz et al., 2019).

Each company's accounting (or economic and financial) ratios were obtained from the Bloomberg Terminal. Recent research has favored accounting ratios over market ratios in assessing corporate performance, particularly with sustainability indexes. Vătavu et al. (2020) argue that accounting data offers a more precise representation of a firm's internal operations and is less susceptible to market volatility than market indicators. Thus, this study adopts a comparable methodology but also provides a comparison of equal-weighted portfolio performance for each group, providing a window into their performance.

In addition, Anton and Nucu (2021) asserted that a business is deemed "in a favorable economic condition" when it sustains an adequate equilibrium between its profitability and liquidity objectives. This research's tests consider the ratios that assess both objectives. The accounting ratios were statistically analyzed through the following nonparametric test: Mann-Whitney. Analyzing the results of these assessments enabled the formulation of conclusions regarding the suggested comparison in the accounting spectrum. Moreover, the study compares the market performance of the two groups of companies constructed in the way of equal-weighted portfolios which serves as a comparison to the results of the accounting ratios.

Literature review

Sustainability and the corporations

By the end of the nineteenth century, authors such as Henry David Thoreau, Thorstein Veblen, and William Morris were engaging with issues pertaining to sustainability (Purvis et al., 2019). Nonetheless, it was not until 1987 that the discourse on sustainable development attained worldwide significance, prompted by the World Commission on Environment and Development's report (WCED, 1987), commonly referred to as the Brundtland Report. The objective of the Brundtland Report was to illustrate the feasibility of a novel epoch of economic expansion predicated on policies that preserve and enhance the basis of environmental resources. These concepts reinforced the belief that sustainable development is crucial for mitigating escalating global poverty (United Nations, 2015).

In 1994, John Elkington introduced the notion of the Triple Bottom Line, asserting that firms' future success would hinge on their capacity to meet not only traditional profitability metrics but also environmental and social goals (Elkington, 1997). In 2018, Elkington reexamined the notion, emphasizing its continued significance and advocating for a more profound incorporation of sustainability into business processes (Elkington, 2018). Recent research, such as those by Saeed and Kersten (2019) and Rosati and Faria (2019), demonstrates that the idea remains relevant; TBL dimensions must continue to be regarded for sustainable production. Rahdari et al. (2020) identified the Triple Bottom Line (TBL) as an aspect of Corporate Social Responsibility (CSR) and sustainability within business frameworks. They indicated that these concepts differ based on the temporal and contextual circumstances in which they are employed. Despite the absence of a universally accepted definition of CSR (Aguinis, 2019), it has emerged as a priority for corporate executives globally (KPMG, 2020).

In this setting, firms are compelled to integrate practices associated with CSR, particularly concerning environmental, social, and governance (ESG) aspects (Fatemi et al., 2018). Eccles et al. (2020) analyzed corporate initiatives to implement these three dimensions and highlighted the absence of standardized norms for disclosing such adjustments to investors and society at large. Luo and Zhang (2020) assert that implementing socially responsible behavior is currently a strategy firms employ to compete in a challenging global landscape.

Recent literature identifies four primary justifications for corporate engagement in CSR: moral responsibility, sustainability, license to operate, and reputation (Aguinis & Glavas, 2019). However, these justifications often exhibit a common deficiency: they focus on the conflict between business and society rather than their interdependence (Aguinis & Glavas, 2019). Consequently, companies should identify methods to strengthen their strategy by enhancing social conditions through a more proactive and customized approach, which can be termed strategic CSR (Husted & Sousa-Filho, 2019). Strategic CSR involves transitioning beyond harm mitigation to generating significant benefits for society and business, a concept often called Creating Shared Value (CSV) (Dembek et al., 2016; Lee, 2019). Traditional CSR emphasizes a company's reputation and has minimal association with the business itself, whereas CSV integrates competitive advantage and business profitability. The shared value framework can be applied to all significant corporate decisions to achieve the appropriate form of profit that generates societal value (Lee, 2019).

Sustainability and the capital markets

Investors increasingly recognize the capacity of companies that adhere to stringent sustainability standards to produce risk-adjusted returns consistent with or exceeding market performance (BlackRock, 2019). Socially responsible investments (SRI) have experienced substantial growth in recent years, constituting a significant share of professionally managed assets globally: 42% in Europe, 33% in the United States, 50% in Canada, and 38% in Australia and New Zealand (Global Sustainable Investment Alliance, 2020). Huang et al. (2023) asserted that investors are inclined to pay a premium for shares of companies that engage in social responsibility and sustainability initiatives, as well as those that implement superior governance and transparency in their management practices. This finding underscores the significance of sustainability and provides companies with additional impetus to pursue this objective.

Concerns regarding implementing socially responsible practices have led to their integration into the financial sector (Caldecot et al., 2024). Major stock exchanges now feature sustainability indices to provide options for investors focused on sustainability-oriented companies. Indices serve to illustrate the performance of capital markets and act as indicators reflecting the behavior of stock prices within a certain market over a designated time frame, encompassing the assessment of overarching economic trends (Liang & Renneboog, 2020). Sustainable screening metrics have recently evolved to assess better companies' sustainability practices (Friede, 2019).

Sustainability indices assess a business based on three criteria: environmental, social, and corporate governance (ESG) factors (Refinitiv, 2020). The evaluation metrics developed from these three variables more precisely delineate issues of social responsibility upon which the indices are founded. Ultimately, the assessment criteria

are categorized into indicators that measure a company's performance, determining its eligibility for inclusion in the index (Sustainable Stock Exchanges Initiative, 2019).

According to Liang and Renneboog (2020), companies listed on stock exchange indices with a corporate responsibility focus can secure alternative funding from investors who prioritize well-being and sustainable development. In this context, corporations are compelled to implement and maintain socially responsible practices within their strategic management (Eccles et al., 2019). The inaugural sustainability index, launched in 1999, was the Dow Jones Sustainability Index (DJSI), an initiative by S&P Dow Jones Indices and RobecoSAM to monitor the performance of leading global companies based on economic, environmental, and social factors (S&P Global, 2021). In 2001, two years later, the London Stock Exchange Group collaborated with FTSE Russell, a British institution providing indexes and financial services, to establish its own sustainability index, FTSE4Good (FTSE Russell, 2021). The index was created to objectively assess the performance of companies that adhere to globally acknowledged corporate responsibility norms concerning environmental, social, and corporate governance factors (FTSE Russell, 2021).

The existing literature was an important guideline for the study. An extension of studies is listed in Table 1.

Table 1. Findings from Articles that were selected for further examination (Source: Author's research results)

Findings about the relationship of financial performance and sustainability	**Authors**
Neutral	Brown, D., & Smith, J. (2023)
Positive	D'Amato, A., Henderson, S., & Florence, K. (2022)
Positive	Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2023)
Negative	Garcia, J. M., & Torras, M. (2022)
Positive	Luo, L., & Tang, Q. (2023)
Negative	Malik, M., & Brown, P. (2022).
Neutral	Rivera, C., & Gupta, A. (2022)
Negative	Santos, A., & Pereira, J. (2023)
Positive	Thompson, A., & Zhao, W. (2024)

Hospitality's client service, real estate investments, and vulnerability to external shocks make it a dynamic financial performance environment. The industry's vulnerability to external events like the COVID-19 epidemic emphasizes the need for agility and strategic adaptation for financial resilience (Lee et al., 2023). The return on assets, profit margins, and occupancy rates of enterprises investing in technology and service diversity typically beat traditional models (Tsai & Tseng, 2021). Strategic improvements include improving client experiences, diversifying services, and applying risk management have helped maintain financial stability and enhance post-crisis recovery. The hospitality industry's capital intensity and variable demand make it excellent for studying financial management in dynamic markets.

Methodology

To answer the research questions in the study, the companies that are part of the hospitality industry were divided into two groups based on their sustainability score as ranked by Bloomberg ESG Scoring, and then statistical analysis was performed on the respective accounting ratios. Finally, an equal-weight portfolio was constructed to compare the market performance of the two groups to compare the accounting ratios analysis results with market performance results.

The study focuses on hospitality companies and their ESG score. Hence, to identify said companies, the MSCI Global Industry Classification Standard (GICS) categorization was used to construct the study sample. The sample is built using the GICS code 253010, which encompasses companies under the classification hierarchy as presented in Table 2. Information was obtained by using the EQS function in the Bloomberg Terminal. The target stock exchanges are displayed based on the active stock listing in Asia Pacific, Eastern Europe, Latin America & Caribbean, Middle East & Africa, North America, and Western Europe. Then, Bloomberg's ESG score was used to rank the companies and group them into two categories as sustainable (score between 3 to 7) and unsustainable (score between 0 and 3). Companies that did not include a Bloomberg ESG score were excluded from the study. A total of 358 companies were shortlisted, of which 127 were grouped as sustainable and 231 as unsustainable. This process formed the collection of companies that would serve as the initial research sample.

Table 2. Company sample universe as GICS Classification Hierarchy (Source: Author's research results)

Classification Hierarchy - GICS Code
Consumer Discretionary
- Hotels, Restaurants & Leisure
-- *Casino & Gaming*
-- *Hotels, Resorts & Cruise Lines*
-- *Leisure Facilities*
-- *Restaurants*

The collection of companies' financial data and accounting ratios was performed by using once again the Bloomberg Terminal. The data collection was conducted on companies identified in the previous stage of the methodology.

From financial data collected using the Bloomberg Terminal, it was possible to obtain the financial ratios used for the study. Ratios used encompass Return on Assets (ROA), Return on Equity (ROE), Return on Investment (ROI), Bloomberg Liquidity Assessment Score (LQA), Quick Ratio, and Current Ratio. Eccles et al. (2014) used ratios for ROA and ROE but did not include any liquidity ratios in their analysis of North American companies. Thus, the present study enriches the debate with one more profitability ratio and the addition of three liquidity ratios. The equations used for the profitability and liquidity ratios and their respective meanings are presented in Table 3.

Table 3. Financial Ratios used and their definitions (Source: Author's research results)

Ratio	Definition
ROA	The yield produced by each monetary unit invested in a company
ROE	Evaluates the returns earned on the Shareholder's investments
ROI	Assesses the revenue produced relative to the overall investment incurred
LQA	A proprietary metric developed by Bloomberg to evaluate the liquidity of financial instruments, particularly fixed-income securities like corporate bonds, government bonds, and other debt instruments
Quick Ratio	Measures a company's ability to cover its short-term liabilities with its most liquid assets
Current Ratio	Assesses a company's ability to pay off its short-term liabilities with its current assets

Companies with missing financial information were excluded from the study due to the impossibility of using them for statistical tests. Therefore, a total of 46 companies were excluded. Of these, 18 belonged to the sustainable group and 27 to the unsustainable group. This lowered the number of the groups to 109 for sustainable and 204 for unsustainable.

Statistical analysis was employed to derive results regarding profitability and liquidity ratios. To ascertain the feasibility of using parametric tests, it was necessary to verify the normality of the variables' distribution and the homogeneity of the variances. Probabilistic tests can assess normality, with the Kolmogorov-Smirnov test being one of the most frequently employed (Hair et al., 2019). The Kolmogorov-Smirnov test was conducted on the variables representing the profitability and liquidity of the sample. The study was conducted using IBM SPSS 27 software, and the results indicated that the data did not conform to a normal distribution. Consequently, it was determined that implementing nonparametric tests was essential, specifically the Mann-Whitney test.

In situations where the prerequisites for the performance of the analysis of variance (ANOVA) cannot be met (in this scenario, the samples do not have a normal distribution). The Kruskal-Wallis test can be applied to two groups, although it is neither optimal nor efficient. The Mann-Whitney U test is favored in these instances as it is explicitly intended to compare two independent groups. Both tests would produce identical outcomes when comparing two groups; however, the Mann-Whitney test is more straightforward and statistically suitable for this context (Corder & Foreman, 2009).

This research employed the Mann-Whitney test to analyze sample differences between the sustainable and unsustainable groups of organizations. The Mann-Whitney U test, or Wilcoxon rank-sum test, is a non-parametric method commonly used to compare the two independent groups' medians. It serves as an alternative to the independent t-test, especially when data fails to satisfy normality assumptions or when sample sizes are limited (Field, 2018). In recent years, the Mann-Whitney U test has been widely

employed in several domains like medical, finance, and social sciences. Lin et al. (2020) utilized the test to assess treatment efficacy disparities between two patient cohorts in clinical trials. In contrast, Jeong et al. (2021) applied it to examine financial performance variations across different industry sectors.

The test is preferred as it does not necessitate the assumption of normal distribution and can accommodate ordinal data, rendering it appropriate for varied datasets. A recent study highlights the robustness of the Mann-Whitney U test in managing skewed data distributions. Lee and Lee (2021) established that the test proficiently identifies disparities in central trends among groups, regardless of the normality of the data distribution. Mair and Wilcox (2020) determined that the Mann-Whitney U test exhibits superior statistical power compared to other non-parametric tests, including the sign test, when addressing asymmetric data. Recent research has juxtaposed the Mann-Whitney U test with alternative non-parametric techniques. Sriram and Kumar (2019) demonstrated that although the Mann-Whitney U test is effective for small sample sizes, its performance can approximate that of parametric tests like the independent t-test when sample sizes are substantial, particularly if the data are approximately normal. Furthermore, Gibbons and Chakraborti (2019) proposed that the Mann-Whitney U test is more dependable than permutation testing in scenarios when precise p-values are challenging to ascertain due to computing limitations. The Mann-Whitney test yields a p-value that evaluates the null hypothesis (H0), which posits that the populations of the two studied groups possess identical medians. Acceptance of H0 happens for any p-value exceeding 0.05.

The non-parametric test was performed for each ratio (ROA, ROE, ROI, LQA, QR, and CR). The variables used in the study were the last reported financial indicators, which reflect the financial year 2023 for each company.

The equal weight portfolio strategy is a simple investment method in which each asset is allocated an equal proportion, irrespective of its market capitalization or value. DeMiguel, Garlappi, and Uppal (2009) assert that this strategy is straightforward yet efficacious in preventing the portfolio's performance from being disproportionately affected by larger companies, a common occurrence in market-cap-weighted portfolios. It offers a more equitable exposure to the constituent assets, guaranteeing that small and mid-cap companies exert an equivalent impact on portfolio performance as large-cap enterprises.

The empirical utilization of EWPs in portfolio comparison has been thoroughly investigated. Fan and Uppal (2018) revealed that the EWP effectively evaluates the comparative performance of portfolios with varying sectoral makeup. Kritzman (2017) emphasized its effectiveness in evaluating global portfolios with diverse exposure to various countries and industries, proposing that EWPs can function as a neutral benchmark.

Therefore, the two groups are used to construct the portfolios which are then used as benchmarks to compare against one another to also reflect the market performance other than the accounting one.

Results and discussion

Financial Ratios

The financial data is acquired via the Bloomberg Terminal, as outlined in the methods chapter. The data was subsequently organized, and the averages for each group were computed. The findings are presented in Table 4. The data indicates that the Sustainable Group's profitability and liquidity surpass those of the Unsustainable Group, with profitability ratios implying nearly double the financial performance for the Sustainable Group. Eccles et al. (2014) observed that the ROA and ROE were higher for sustainable enterprises in the United States. However, the study by P. Santis et al. on Brazilian enterprises indicates differing results, with profitability ratios being far more comparable. The current analysis exhibits a broader regional distribution, and its conclusions align more closely with the findings of Eccles et al. (2014). The current study is conducted over one year, in contrast to the previously referenced research.

Nonetheless, QR and CR exhibit superior values for unsustainable firms. The quest for enhanced liquidity may also arise because of the post-COVID crisis phase (De Castro et al., 2020). Furthermore, Xiao et al. (2018) discovered that an increase in debt financing adversely impacts the performance of sustainable enterprises. Consequently, as liquidity ratios indicate the correlation between assets and liabilities, the elevated liquidity ratios identified in this study might be attributed to a decrease in debt financing as a reaction to the repercussions of the financial crisis. However, the Bloomberg LQA, a more complete ratio, indicates that the sustainable group is better financially equipped in terms of liquidity.

Table 4. Financial Average Ratios calculated from companies of the two groups (Source: Author's research results)

Ratios	Sustainable Group	Unsustainable Group
ROA	4.30	2.80
ROE	12.18	4.29
ROI	8.03	4.25
LQA	71.97	52.82
QR	0.91	1.19
CR	1.19	1.50

Regardless, the liquidity ratios are quite close with the exemption of Bloomberg LQA.

Mann-Whitney Test

The Mann-Whitney test was conducted on all profitability and liquidity ratios. The test run was conducted for the corporate groups, and the results are presented in Table 5.

Table 5. Financial Average Ratios calculated from companies of the two groups

Ratios	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig (2-tailed)
ROA	9682	30592	-1.883	0.06
ROE	7724	28634	-2.697	0.007
ROI	9084	29790	-2.606	0.009
LQA	5883	23838	-6.167	<0.001
QR	9534	15529	-1.885	0.059
CR	9377	15372	-2.22	0.026

The statistical analysis utilizing the Mann-Whitney U test reveals notable differences between the two groups across several key financial ratios. Specifically, significant disparities are observed in Return on Equity (ROE), Return on Investment (ROI), Liquid Quick Assets (LQA), and Current Ratio (CR), as indicated by their respective p-values being below the conventional significance threshold of 0.05 (ROE: p=0.007; ROI: p=0.009; LQA: p<0.001; CR: p=0.026). These results suggest that the two groups differ substantially in terms of profitability measures (ROE and ROI), liquidity (LQA and CR), and overall financial performance. The highly significant result for the Bloomberg LQA (p<0.001) underscores a particularly strong difference in liquidity positions between the groups, which could have critical implications for their financial stability and operational efficiency. Furthermore, it highlights that more complex ratios might be a more relevant indicator when comparing the two groups. Conversely, the ratios for Return on Assets (ROA) and Quick Ratio (QR) did not reach statistical significance at the 5% level, with p-values slightly above the threshold (ROA: p=0.060; QR: p=0.059). Although not statistically significant, these p-values are marginally higher than 0.05, indicating a potential trend that might emerge as significant.

Equally Weighted Portfolio Performance

Since the study encompasses many companies from various regions, currencies, and workdays, the portfolio construction for each group is based on the returns of each stock. This is done due to the various currencies that each stock is quoted on the exchange and to not dilute the performance with the exchange rate to another currency.

The stock prices were collected for each company using Bloomberg Terminal and the companies were divided into the same two groups used in the previous test. The return ratio was then calculated for each company, and the weighting was assigned equally to each company. Afterward, the Portfolio returns were calculated using the formula: $Portfolio\ Return = \sum_{i=1}^{n} \left(\frac{1}{N} * Return_i\right)$, where $Return_i$ is the weekly return of the company i. It should be noted that the study uses a 3-year time frame from 2021 to 2023 and weekly frequency. This was done to have consistency with the time frame and to evade rare market events like COVID-19. Both portfolios assume a $1,000,000.00 initial investment. The results of the two benchmarked portfolios are presented in Figure 1.

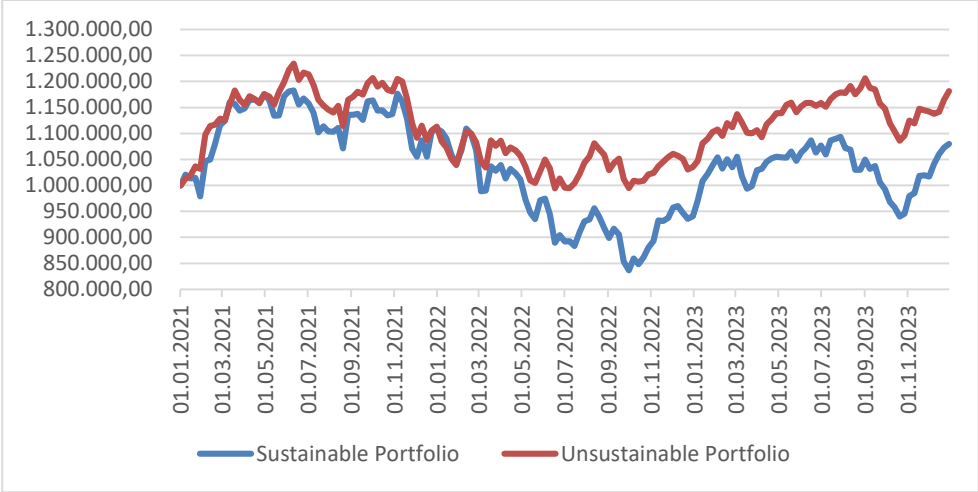

Figure 1. Portfolio built with the sustainable group's companies vs portfolio built with the unsustainable group's companies (Source: Author's research results)

From a portfolio perspective, the unsustainable group portfolio outperformed the sustainable group portfolio in most frequencies and in the full timeframe of the study. Despite the lower financial ratios, the market appears to behave quite differently for each group.

Conclusions

The statistical test findings show significant differences between the two groups in key financial ratios. The significant p-values for ROE, ROI, LQA, and CR suggest large profitability and liquidity disparities between groups. LQA's relevance highlights a liquidity gap that could undermine the groups' short-term financial stability and operational effectiveness. ROA and QR differences were not statistically significant at 5%, although their p-values were over the threshold. This implies tendencies that could become significant with a larger sample or further research. These nearly significant results require additional study to understand the underlying factors fully.

The study underlines the importance of financial ratio analysis in understanding group financial performance differences. The significant discrepancies in profitability and liquidity ratios suggest that one group may use its resources more efficiently or face different market conditions. These insights can improve financial performance and sustainable growth by guiding strategic decision-making, risk evaluation, and policy creation. The portfolio comparison also indicates that financial parameters do not guarantee market performance and that market trends may change despite the company's sustainability efforts.

Ultimately, as previously indicated, this study's results exhibit similarities and differences when compared to the findings of prior research. In this research domain, there remains a lack of definitive convergence in market findings. This underscores the significance of this research, as it provides further information regarding the financial performance of organizations employing diverse tactics and approaches to

sustainability. Furthermore, the research offers a novel insight into the economic impact of sustainability practices in the hospitality industry. Adding more evidence for both academics and professionals in the financial and hospitality space. Future research may extend this study by employing different financial ratios or conducting analyses over an extended timeframe to determine whether long-term disparities in financial performance exist between less-sustainable and more-sustainable organizations.

References

Aguinis, H. (2019). Organizational responsibility: Doing good and doing well. In D. S. Ones, N. Anderson, C. Viswesvaran, & H. K. Sinangil (Eds.), *The SAGE Handbook of Industrial, Work & Organizational Psychology* (2nd ed., Vol. 3, pp. 333–345). SAGE Publications.

Aguinis, H., & Glavas, A. (2019). On corporate social responsibility, sensemaking, and the search for meaningfulness through work. *Journal of Management, 45*(3), 1057–1086.

Anton, S. G., & Nucu, A. E. (2021). Liquidity and profitability trade-off: Evidence from emerging European firms. *Sustainability, 13*(1), 258.

Atz, U., Van Holt, T., Liu, J., & Bruno, P. (2021). ESG and financial performance: Uncovering the relationship by aggregating evidence from 1,000 plus studies published between 2015–2020. NYU Stern Center for Sustainable Business.

BlackRock. (2019). Sustainability: The future of investing. BlackRock Investment Institute.

Brown, D., & Smith, J. (2023). The financial impact of sustainability: A neutral perspective. *Journal of Corporate Finance, 31*(2), 145-159. https://doi.org/10.1016/j.jcorpfin.2023.106546

Caldecott, B., Bolton, P., & Stern, N. (2024). How sustainable finance creates impact: Transmission mechanisms to the real economy. *Journal of Sustainable Finance & Investment*, *16*(2), 134-157.

Corder, G. W., & Foreman, D. I. (2011). *Nonparametric statistics for non-statisticians*.

D'Amato, A., Henderson, S., & Florence, K. (2022). The impact of sustainability practices on corporate financial performance: A meta-analysis. *Journal of Sustainable Finance & Investment, 12*(4), 509-523. https://doi.org/10.1080/20430795.2022.1903549

Deloitte. (2022). Sustainability and ESG trends in 2022. Deloitte Insights.

DeMiguel, V., Garlappi, L., & Uppal, R. (2009). Optimal versus naive diversification: How inefficient is the 1/N portfolio strategy? *Review of Financial Studies, 22*(5), 1915–1953.

Dembek, K., Singh, P., & Bhakoo, V. (2016). Literature review of shared value: A theoretical concept or a management buzzword?. *Journal of Business Ethics, 137*(2), 231–267.

Eccles, R. G., Klimenko, S. (2019). The investor revolution. *Harvard Business Review*, May-June 2019 Issue.

Eccles, R. G., Lee, L. E., & Stroehle, J. C. (2019). The social origins of ESG: An analysis of Innovest and KLD. *Organization & Environment, 32*(4), 463–481.

Eccles, R. G., Lee, L. E., & Stroehle, J. C. (2020). The social origins of ESG: An analysis of Innovest and KLD. *Organization & Environment, 33*(4), 575–596.
Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone Publishing.

Elkington, J. (2018). 25 years ago I coined the phrase "triple bottom line." Here's why it's time to rethink it. *Harvard Business Review*, June 25, 2018.

Fatemi, A., Fooladi, I., & Tehranian, H. (2018). Valuation effects of corporate social responsibility. *Journal of Banking & Finance, 88*, 145–156.

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.

Friede, G. (2019). Why don't we see more action? A meta-synthesis of the investor impediments to integrate environmental, social, and governance factors. *Business Strategy and the Environment, 28*(6), 1260–1274.

Garcia, J. M., & Torras, M. (2022). The impact of ESG on financial performance: A revisit with a regression discontinuity design. *Journal of Sustainable Finance & Investment, 12*(2), 189-203. https://doi.org/10.1080/20430795.2022.1903549

Gibbons, J. D., & Chakraborti, S. (2019). *Nonparametric statistical inference* (6th ed.). CRC Press.

Global Sustainable Investment Alliance (GSIA). (2020). *Global sustainable investment review 2020*.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

Huang, Y., Sun, L., & Wang, J. (2023). A meta-analysis of ESG disclosure and listed companies' financial performance. *Journal of Business Ethics, 167*(3), 491-507. https://doi.org/10.1007/s10551-022-05099-7

Husted, B. W., & Sousa-Filho, J. M. de. (2019). The impact of sustainability governance, country stakeholder orientation, and country risk on environmental, social, and governance performance. *Journal of Cleaner Production, 219*, 307–316.

IPCC. (2021). *Climate change 2021: The physical science basis. Contribution of working group I to the sixth assessment report of the intergovernmental panel on climate change*. Cambridge University Press.

Jeong, S., Kim, D., & Park, J. (2021). Financial performance analysis using nonparametric methods: A comparison study. *Journal of Finance & Data Analysis, 18*(3), 205–215.

KPMG. (2020). *The time has come: The KPMG survey of sustainability reporting 2020*. KPMG International.

Kritzman, M. (2017). Global asset allocation: Performance comparisons across strategies. *Financial Analysts Journal, 73*(3), 102–116.

Lee, K., & Lee, H. (2021). Comparative efficiency of nonparametric tests in small sample studies. *Statistical Methods and Applications, 30*(2), 213–228.

Lee, L. (2019). Implementing shared value and the role of the strategic CSR professional. *Corporate Governance: The International Journal of Business in Society, 19*(2), 281–298.

Lee, M., Kim, J., & Park, S. (2023). Supply chain resilience and financial performance during crises: Evidence from the hospitality industry. *Journal of Business Research*, 152, 234-245.

Liang, H., & Renneboog, L. (2020). Corporate social responsibility and sustainable finance: A review of the literature. *European Corporate Governance Institute (ECGI) - Finance Working Paper No. 701/2020*.

Lin, J., Xu, Y., & Zhang, W. (2020). Application of Mann-Whitney U test in clinical trials. *Medical Research Archives, 7*(4), 58–65.

Luo, J., & Zhang, N. (2020). Corporate social responsibility disclosures and market efficiency: Evidence from an emerging market. *International Review of Economics & Finance, 65*, 105–117.

Malik, M., & Brown, P. (2022). Corporate social responsibility and financial performance: The role of corporate reputation. *Public Relations Review, 48*(1), 91–101. https://doi.org/10.1016/j.pubrev.2022.102239

Mair, P., & Wilcox, R. R. (2020). Robust statistical methods in R: The case of the Mann-Whitney U test. *Journal of Statistical Software, 94*(1), 1–27.

Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: In search of conceptual origins. *Sustainability Science, 14*(3), 681–695.

Rahdari, A., Sepasi, S., & Moradi, M. (2020). Achieving sustainability through Schumpeterian social entrepreneurship: The role of social enterprises. *Journal of Cleaner Production, 229*, 347–360.

Refinitiv. (2020). *Environmental, social and governance (ESG) scores from Refinitiv*. Refinitiv.

Rivera, C., & Gupta, A. (2022). ESG practices and financial performance: A neutral assessment. *Journal of Business Research, 144*(3), 22–35. https://doi.org/10.1016/j.jbusres.2022.07.011

Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2022). *Fundamentals of corporate finance* (13th ed.). McGraw-Hill Education.

Rosati, F., & Faria, L. G. D. (2019). Business contribution to the sustainable development agenda: Organizational factors related to early adoption of SDG reporting. *Corporate Social Responsibility and Environmental Management, 26*(3), 588–597.

Saeed, M. A., & Kersten, W. (2019). Drivers of sustainable supply chain management: Identification and classification. *Sustainability, 11*(4), 1137.

Santos, A., & Pereira, J. (2023). The role of internal control systems in ensuring financial performance sustainability. *Sustainability, 15*(3), 489-501. https://doi.org/10.3390/su15032045

Sriram, A., & Kumar, S. (2019). A comparison between parametric and non-parametric tests: An application to experimental data. *Asian Journal of Research in Mathematics and Statistics, 3*(4), 204–215.

Sustainable Stock Exchanges Initiative. (2019). *Model guidance on reporting ESG information to investors*. Sustainable Stock Exchanges Initiative.

Thompson, A., & Zhao, W. (2024). From reporting to responsibility: Investigating the influence of sustainability disclosure on earnings management. *Environment, Development and Sustainability, 26*(2), 145–160. https://doi.org/10.1007/s10668-024-02365-7

Tsai, Y., & Tseng, H. (2021). Service diversification and financial performance in the hospitality sector. *International Journal of Hospitality Management*, 94, 102-113.

UN Global Compact. (2019). *Progress report*. United Nations Global Compact.

United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations General Assembly Resolution A/RES/70/1.

Vătavu, S., Stăniște, G., & Sîrghi, N. (2020). The impact of financial ratios on the market price of shares: Evidence from the Bucharest Stock Exchange. *Sustainability, 12*(12), 4926.

World Commission on Environment and Development (WCED). (1987). *Our common future*. Oxford University Press.

Zaremba, A., Kizys, R., & Mikutowski, J. (2023). Sustainable finance and ESG importance: A systematic literature review. *Finance Research Letters, 56*, 102459. https://doi.org/10.1016/j.frl.2023.102459