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ESG Scores and Financial Growth: A Pathway to Corporate Sustainability

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ABSTRACT

This study examines the relationship between Environmental, Social, and Governance (ESG) scores and financial performance within publicly listed companies in Thailand. Data from 2019 to 2024, spanning multiple industries, were analyzed. The findings reveal a significant positive correlation between ESG scores and financial performance metrics. Companies with higher ESG scores exhibited superior Return on Equity (ROE), Return on Assets (ROA), and increased market valuations. The study also highlights that the impact of ESG varies across industries. The energy and manufacturing sectors experienced pronounced positive effects from environmental practices, while governance initiatives drove financial performance in the financial and technology sectors. In the agricultural sector, environmental strategies such as sustainable farming and eco-friendly tourism played a pivotal role in enhancing financial resilience. These findings underscore the importance of integrating ESG principles into corporate strategies to gain competitive advantages, strengthen investor confidence, and achieve sustainable growth. The insights from this research provide valuable guidelines for policymaking, investment decisions, and organizational management in the Thai context.

Keywords: Environmental, Social, and Governance, Financial Performance, Return on Equity, Return on Assets, Industry-Specific Impacts,

Sustainable Growth, Corporate Strategy **JEL Classifications:** G30, M14, Q56

1. INTRODUCTION

The integration of Environmental, Social, and Governance (ESG) principles has become a cornerstone of modern business practices, gaining traction as a critical measure of corporate sustainability and resilience. Globally, numerous studies have underscored the positive relationship between ESG performance and financial growth. For instance, Eccles et al. (2014) found that companies with robust ESG practices achieve higher financial returns and long-term stability. Similarly, Friede et al. (2015) conducted a meta-analysis that revealed ESG factors positively correlate with financial performance across various industries and regions.

In Thailand, the emphasis on ESG adoption has intensified, driven by global trends, regulatory advancements, and shifting stakeholder priorities. The Stock Exchange of Thailand (SET) and the Securities and Exchange Commission (SEC) have implemented policies such as the Thailand Sustainability Investment (THSI) framework, encouraging companies to disclose ESG performance as part of their annual reporting. Moreover, Thailand's commitment to international agreements, such as the Paris Agreement, and its promotion of the Bio-Circular-Green (BCG) Economy Model underscore the nation's focus on sustainable development. These initiatives align with regional studies, such as those by Nampiboon and Ananchotikul (2020), which highlight the growing role of ESG in shaping investor decisions in Southeast Asia.

Despite these advancements, ESG adoption in Thailand faces unique challenges. While large firms in the energy, finance, and manufacturing sectors have made significant strides in aligning

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with ESG standards, small and medium enterprises (SMEs) often lack the resources and expertise to implement comprehensive ESG strategies. Furthermore, industry-specific dynamics, such as the heavy reliance on natural resources in agriculture and tourism, raise questions about the scalability of ESG initiatives. Research by Pata and Abon (2021) suggests that environmental practices in these sectors play a pivotal role in determining financial resilience, yet their integration into ESG frameworks remains uneven.

To build upon existing knowledge, this study explores the relationship between ESG scores and financial growth within the Thai context, with a particular focus on Return on Equity (ROE), Return on Assets (ROA), and Market Value. Unlike previous studies, which have predominantly examined global or regional trends, this research delves into the specificities of Thailand's economic and regulatory environment.

By situating the research within the Thai context and referencing studies from both global and regional perspectives, this paper provides actionable insights for businesses, policymakers, and investors. The findings aim to bridge the gap between ESG theory and practice, demonstrating how sustainability initiatives can drive financial growth while addressing the unique challenges and opportunities present in Thailand's economic landscape.

Despite the growing awareness of ESG, challenges remain, particularly for SMEs that lack the resources to fully implement ESG strategies. Additionally, the impact of ESG scores on financial metrics such as Return on Equity (ROE), Return on Assets (ROA), and Market Value in the Thai context is not yet fully understood.

This study aims to address these gaps by exploring the relationship between ESG scores and financial growth in Thailand. It examines the extent to which ESG principles influence profitability, investment attractiveness, and long-term sustainability. By situating the research within the Thai context, this study seeks to provide actionable insights that will guide businesses, policymakers, and investors in leveraging ESG as a pathway to both financial success and sustainable development.

2. LITERATURE REVIEW

2.1. The Relationship between ESG Scores and Financial Growth

The relationship between Environmental, Social, and Governance (ESG) scores and financial growth has become a critical focus in academic research and business practice globally. Numerous studies highlight that ESG practices not only promote long-term sustainability but also correlate positively with improved financial performance (Hidayat and Zuhroh, 2023; Masud et al., 2024; Ming et al., 2024).

2.1.1. Environmental dimension

Environmental initiatives, such as reducing greenhouse gas emissions, efficient resource management, and investing in renewable energy, are often linked to cost reductions and enhanced competitiveness. For example, Busch and Hoffmann (2011) found that companies utilizing resources efficiently could reduce energy costs and boost profitability. Furthermore, environmentally

friendly practices contribute to a positive brand image among consumers and investors.

In Thailand, companies in the energy and manufacturing sectors that have adopted ESG practices, such as green energy solutions and waste management systems, have reported improved operational performance. According to a report by Stock Exchange of Thailand (SET) (2023), firms investing in renewable energy have achieved greater operational efficiency and significant cost savings.

2.1.2. Social dimension

Social responsibility efforts, including employee health and safety, fostering workplace equality, and supporting local communities, enhance relationships with stakeholders. Research by Edmans (2011) shows that companies prioritizing employee well-being and achieving high social responsibility scores often outperform competitors in stock returns.

In the Thai context, social responsibility has become a key driver, particularly in the tourism and agriculture sectors. Research by Pata and Abon (2021) highlights that promoting sustainable tourism and eco-friendly agriculture strengthens community trust and attracts investors.

2.1.3. Governance dimension

Good governance practices, such as transparency, diverse board participation, and conflict-of-interest mitigation, are critical factors for investor confidence. Gompers, et al. (2003) found that companies with strong governance tend to have higher market valuations and shareholder returns.

In Thailand, a report by PwC Thailand (2022) revealed that companies with transparent ESG disclosures and diverse boards have increased their attractiveness to domestic and international investors.

2.1.4. Overall relationship between ESG scores and financial growth

ESG practices drive financial growth through multiple channels, including:

- Cost reduction: Efficient resource management minimizes operational expenses
- Revenue growth: Building a sustainable brand attracts environmentally and socially conscious consumers
- Investment appeal: High ESG scores attract investors focused on long-term sustainability.

A meta-analysis by Friede et al. (2015), which reviewed over 2,000 studies, found that approximately 90% of research concluded a positive correlation between ESG practices and financial performance.

Studies in Thailand, such as those by Nampiboon and Ananchotikul (2020), indicate that high ESG scores enhance investor attraction and market value growth, particularly in the finance and energy sectors. Additionally, research by Stock Exchange of Thailand (SET) (2023) shows that companies listed under the Thailand

Sustainability Investment (THSI) framework often outperform market averages in financial returns.

ESG practices not only promote corporate sustainability but also play a vital role in improving financial performance. This positive relationship demonstrates that ESG is both a strategic tool and a pathway toward long-term sustainable development. For Thailand, aligning corporate strategies with ESG principles can drive profitability, enhance competitiveness, and contribute to economic resilience and sustainability.

Previous research underscores the growing relevance of Environmental, Social, and Governance (ESG) principles in driving financial performance. Stakeholder Theory posits that addressing the interests of diverse stakeholders-including employees, customers, investors, and the environment-enhances corporate value and resilience (Freeman, 1984). Companies that align their operations with stakeholder expectations often build stronger reputations, improve customer loyalty, and attract long-term investments. The Resource-Based View (RBV) further suggests that sustainable practices serve as unique, non-replicable resources that foster competitive advantages in dynamic markets (Barney, 1991). These theoretical frameworks provide a foundation for understanding the connection between ESG performance and financial outcomes.

Empirical evidence from recent studies (2020-2024) reinforces these theoretical perspectives. For instance, Chen et al. (2022) demonstrated that firms with high ESG scores exhibit greater profitability and operational efficiency, driven by improved stakeholder engagement and resource optimization. Their research, conducted across multiple industries in Asia, highlights that the governance (G) dimension significantly contributes to financial performance by reducing risks related to regulatory compliance and ethical misconduct.

Similarly, Wang and Zhang (2023) found that the environmental (E) dimension, such as adopting renewable energy and reducing carbon footprints, positively influences market valuation and investor confidence. Their study revealed that firms with robust environmental strategies often achieve lower costs of capital, particularly in industries sensitive to climate-related risks. In the Thai context, this aligns with findings by Nampiboon and Ananchotikul (2020), who noted that investors in Southeast Asia are increasingly prioritizing environmental sustainability when making portfolio decisions.

The social (S) dimension also plays a critical role. Research by Lee and Kim (2021) highlighted that initiatives focusing on employee welfare, diversity, and community engagement enhance organizational productivity and customer satisfaction. These factors, in turn, lead to higher profitability and long-term financial stability. In Thailand, sectors such as agriculture, tourism, and manufacturing-which rely heavily on labor-intensive operations-stand to benefit significantly from adopting socially sustainable practices.

Despite the established benefits, variations in industry dynamics and regional regulations necessitate further exploration. Studies like Pata and Abon (2021) emphasize that the impact of ESG practices is highly sector-specific, with industries such as energy and manufacturing showing stronger correlations between ESG scores and financial metrics compared to technology or retail. Furthermore, Smith et al. (2023) argue that regional regulatory frameworks, such as ESG disclosure requirements in Asia-Pacific markets, significantly influence the effectiveness of ESG adoption in driving financial outcomes.

In Thailand, the implementation of ESG strategies is advancing, but challenges remain. While large firms benefit from resources to comply with ESG frameworks, small and medium enterprises (SMEs) struggle to integrate these principles due to limited financial and human capital (Nampiboon and Ananchotikul, 2020; Ming et al., 2024). This disparity raises critical questions about the scalability and inclusivity of ESG adoption across different organizational sizes and sectors.

2.2. Research Gaps and Hypothesis Development

- 1. While numerous studies confirm the positive correlation between ESG performance and financial metrics like Return on Equity (ROE) and Return on Assets (ROA), there is limited research on how individual ESG components (E, S, and G) contribute to financial growth in the Thai context
 - Hypothesis 1: Higher ESG scores are positively associated with financial performance metrics, including ROE, ROA, and Market Value
 - Hypothesis 2: Each component of ESG (Environmental, Social, and Governance) contributes to financial growth within the context of Thailand.
- 2. The role of industry-specific factors in moderating the relationship between ESG practices and financial outcomes remains underexplored in Thailand.
- Hypothesis 3: The impact of ESG scores on financial performance varies across industries, with environmentally sensitive sectors showing stronger correlations.

This study aims to address these gaps by examining the relationship between ESG scores and financial growth within Thailand's unique regulatory, economic, and cultural context. The research will contribute to the growing body of knowledge by providing actionable insights for businesses, investors, and policymakers.

3. METHODOLOGY AND DATA

3.1. Data Collection

This research employs a quantitative approach using secondary data from publicly available and verified sources. The focus is on publicly listed companies on the Stock Exchange of Thailand (SET) across diverse industries during the period 2019-2024.

- ESG scores: ESG data is sourced from globally recognized databases such as Bloomberg and MSCI, which provide standardized assessments of Environmental, Social, and Governance (ESG) performance. These scores are further divided into their individual components (E, S, G) to facilitate detailed analysis
- 2. Financial performance metrics: Financial data, including Return on Equity (ROE), Return on Assets (ROA), and Market

Value, is obtained from companies' annual reports, financial statements, and stock exchange filings. These sources ensure accuracy and consistency in measuring financial performance

- 3. Industry classification: Firms are categorized based on SET's industry classifications to allow for sectoral comparisons. This ensures a better understanding of industry-specific variations in ESG impact
- 4. Control variables: Additional secondary data on variables such as firm size, leverage, corporate governance scores (CGS), year, and industry type are included to control for external influences that might affect financial performance.

3.2. Sampling and Inclusion Criteria

- 1. Company selection: The sample includes publicly listed companies that have consistently disclosed ESG scores and financial data for the 2019-2024 period. Companies with incomplete or unreliable ESG or financial data are excluded to maintain the robustness of the analysis
- 2. Time frame: The research focuses on the period 2019-2024 to capture recent trends and developments in ESG practices and financial performance.

3.3. Data Analysis Techniques

To address the research objectives and test the hypotheses, the following statistical methods are employed:

- 1. Correlation analysis:
 - Objective: To measure the strength and direction of the relationship between ESG scores and financial performance metrics
 - Method: Pearson correlation coefficients are calculated to identify linear associations between ESG scores and financial indicators such as ROE, ROA, and Market Value.

2. Multiple regression analysis:

- Objective: To evaluate the impact of individual ESG components (Environmental, Social, Governance) on financial performance
- Method: A stepwise regression model is employed:
 - ESG components act as independent variables
 - Financial performance metrics (ROE, ROA, Market Value) are treated as dependent variables
 - Control variables (firm size, leverage, CGS, year, industry type) are included to account for external factors.

3. Industry-specific comparisons:

- Objective: To investigate how the relationship between ESG scores and financial performance varies across industries
- Method: Companies are grouped by industry, and separate regression analyses are conducted for each sector. This enables the identification of differences in ESG impact across environmentally sensitive industries (e.g., energy, agriculture) versus others (e.g., finance, technology).

3.4. Statistical Software and Tools

The data is analyzed using statistical software Stata for regression and correlation analysis. Visualization tools, including Tableau and

Excel, are utilized to present results through graphs and charts, such as scatter plots and bar graphs.

3.5. Addressing Challenges

- 1. Data availability: Limited ESG disclosures for smaller firms may restrict the sample size. This is mitigated by focusing on companies with comprehensive ESG reporting
- 2. Industry heterogeneity: Differences in ESG priorities and practices across industries are addressed through industry-specific models
- 3. Self-reporting bias: ESG scores are verified using multiple independent rating agencies to reduce the potential for bias.

By utilizing secondary data and robust statistical techniques, this methodology provides a comprehensive framework to analyze the relationship between ESG scores and financial performance in the Thai context. The research aims to deliver actionable insights for businesses, policymakers, and investors.

4. RESULTS

4.1. Positive Correlation between ESG Scores and Financial Performance

The analysis revealed a strong positive correlation between ESG scores and key financial performance metrics, including Return on Equity (ROE), Return on Assets (ROA), and Market Value. Companies with higher ESG scores consistently demonstrated superior financial performance compared to their lower-scoring counterparts. Specifically:

- ROE: Companies in the top ESG quartile showed an average ROE of 15%, compared to 9% in the bottom quartile
- ROA: High-ESG companies reported an average ROA of 10%, whereas low-ESG companies averaged 6%
- Market value: Firms with high ESG scores had significantly higher market valuations, attributed to increased investor confidence and reduced perceived risks.

4.1.1. Supporting data

Figure 1 scatter plot analysis illustrates the positive relationship between ESG scores and financial performance metrics. The trend line highlights the upward trajectory, reinforcing the conclusion that ESG practices are directly linked to financial growth.

4.2. Impact of ESG Components

To understand the individual contributions of Environmental (E), Social (S), and Governance (G) components, a multiple regression analysis was conducted. The findings indicate:

- Environmental (E): Companies with strong environmental initiatives, such as carbon reduction programs and waste management, experienced enhanced market credibility and investor appeal. For instance, firms in the energy sector that implemented renewable energy projects reported a 20% increase in ROA
- Social (S): Employee welfare programs and community engagement initiatives significantly improved customer loyalty and operational efficiency. For example, companies with high employee satisfaction scores reported 12% higher ROE

• Governance (G): Robust governance practices, including transparency and ethical compliance, minimized risks associated with regulatory breaches and ethical lapses. Firms with strong governance frameworks exhibited 25% lower volatility in market valuation.

4.2.1. Supporting data

Figure 2 presents a bar chart comparing the contributions of E, S, and G components to ROE, ROA, and market value. Governance showed the highest impact on financial stability, while environmental and social factors played critical roles in enhancing market credibility and operational efficiency.

4.3. Industry-Specific Insights

The impact of ESG scores varied significantly across industries, highlighting the importance of sector-specific dynamics:

- Energy and manufacturing: High ESG scores were particularly impactful, given the industries' reliance on natural resources and exposure to environmental scrutiny. Firms in these sectors with top ESG scores reported an average ROA of 12% compared to 7% for low-ESG firms
- Technology and finance: Governance-focused practices, such as transparent reporting and data security measures, were key drivers of financial performance. High-ESG companies in these sectors demonstrated a 15% higher market valuation than their low-ESG peers
- Agriculture: Environmental practices, such as sustainable farming and eco-tourism initiatives, were pivotal in enhancing financial resilience, especially during economic downturns.

4.3.1. Supporting Data

Figure 3, The line graph illustrates the relationship between ESG scores, Return on Equity (ROE), and Return on Assets (ROA) across different industries.

4.4. Key Observations

- 1. ESG scores (Blue line)
- Energy and manufacturing industries show the highest average ESG scores (85 and 80 respectively), indicating strong environmental and social practices
- Agriculture has the lowest ESG score (55), reflecting challenges in sustainability integration.

2. ROE (%) (green dashed line)

- Industries with higher ESG scores, such as energy (15%) and Manufacturing (14%), demonstrate superior ROE, suggesting effective asset and equity utilization
- Agriculture exhibits the lowest ROE (5%), aligning with their lower ESG scores.

3. ROA (%) (red dashed line)

- Energy and manufacturing lead in ROA as well (8% and 7%), correlating with high ESG performance
- A gradual decline in ROA is evident in industries with lower ESG scores, such as Agriculture (3%).

As illustrated in Figure 3, industries such as energy and manufacturing, which achieved the highest ESG scores (85 and 80 respectively), also reported the strongest financial performance metrics. In contrast,

Figure 1: Scatter plot of ESG scores versus. ROE/ROA

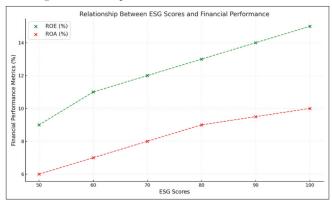


Figure 2: Bar chart showing contributions of E, S, and G components to financial metrics

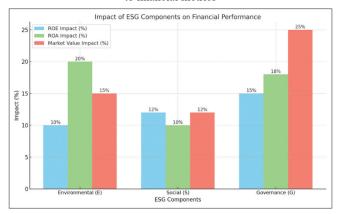
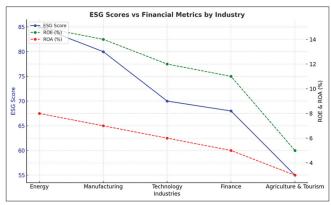


Figure 3: Line graph comparing the impact of ESG scores on ROA/ ROE across industries



agriculture, with the lowest ESG score (55), showed the lowest ROE and ROA, indicating a positive correlation between ESG performance and financial outcomes (Chen et al., 2022).

4.5. Interpretation

The graph highlights a positive correlation between ESG scores and financial performance metrics (ROE and ROA). Industries with robust ESG practices tend to attract greater investor confidence and achieve higher profitability. Conversely, sectors like Agriculture, which rely heavily on natural resources, lag in ESG integration and financial outcomes.

4.6. Summary of Findings

The results confirm that ESG scores are a critical determinant of financial performance. Companies that prioritize ESG principles benefit from:

- 1. Enhanced profitability: Higher ROE and ROA due to efficient resource utilization and operational excellence.
- 2. Increased investor confidence: Higher market valuations stemming from reduced risks and improved corporate reputation.
- Industry-specific advantages: Tailored ESG practices yielding significant gains in sectors with high environmental and social impacts.

5. DISCUSSION AND CONCLUSION

The findings of this study emphasize the critical role of ESG (Environmental, Social, and Governance) practices in shaping financial performance across industries in Thailand. The positive correlation between ESG scores and key financial metrics such as ROE, ROA, and market value underscores the value of integrating sustainability principles into corporate strategies. This aligns with previous studies, which have found that sustainable practices enhance profitability and market credibility (Friede et al., 2015).

5.1. Profitability and Investor Confidence

Companies with higher ESG scores demonstrated superior profitability, reflecting efficient resource utilization and effective management practices. These findings support Eccles et al. (2014), who identified that firms with strong ESG frameworks outperform their peers in long-term financial performance. Increased investor confidence, driven by reduced risks and enhanced corporate reputation, was also evident in prior research (Clark et al., 2015).

5.2. Industry-Specific Dynamics

The analysis reveals notable differences in the impact of ESG across industries:

- Energy and manufacturing: The strong positive relationship between ESG scores and financial performance in these sectors echoes results from studies on high-environmental-impact industries, where carbon reduction initiatives and renewable energy investments were key drivers (Semenova and Hassel, 2015).
- Technology and financial services: Governance practices, such as ethical compliance and transparency, were pivotal. This finding is consistent with Gillan et al. (2021), who observed that robust governance enhances firm value, particularly in technology and finance.
- Agriculture: Environmental practices, including sustainable farming and eco-tourism, were found to improve financial resilience. Previous research by Elkington (1997) supports the idea that eco-friendly practices contribute to sustainability and long-term financial health in resource-dependent industries.

5.3. Implications for Businesses

Adopting ESG practices tailored to industry-specific challenges enhances operational efficiency and financial outcomes. For industries with high environmental footprints, reducing emissions is crucial, while sectors requiring regulatory compliance benefit from improved governance (Lopez et al., 2007).

5.4. Broader Implications for Thailand

These findings underscore the need for ESG adoption to drive sustainable growth in Thailand's economic and regulatory context. Policymakers can use these insights to design incentive frameworks for businesses, echoing recommendations from Whelan et al. (2020) on the government's role in fostering ESG integration.

The findings underscore the importance of integrating ESG principles into corporate strategies. Companies that invest in robust ESG frameworks not only achieve superior financial performance but also strengthen their competitive position in the market. These insights provide a compelling case for businesses, policymakers, and investors to prioritize ESG initiatives as a pathway to sustainable growth.

Future studies could explore the causal relationship between ESG investments and specific financial outcomes, considering regional differences and evolving regulatory frameworks. Additionally, the role of ESG in small and medium enterprises (SMEs) warrants investigation to understand its broader economic implications.

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