

Economic Expertise in Leadership: Do CEO Economic Certifications Drive Corporate EES Performance

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ABSTRACT

This study examines the relationship between CEO economic certifications and corporate sustainability performance, particularly in environmental, economic, and social (EES) aspects. Using a dataset of non-financial companies listed on the Indonesia Stock Exchange (IDX) from 2016 to 2021, the study applies Upper Echelons Theory to explore how CEO economic expertise influences strategic decision-making and corporate sustainability outcomes. The results show a significant positive correlation between CEO economic certification and EES Scores, suggesting that CEOs with economic backgrounds are more adept at implementing sustainability strategies, optimizing resource management, and improving corporate transparency. The findings also emphasize the increasing regulatory and market-driven expectations for corporate sustainability in Indonesia, particularly under frameworks such as POJK 51/2017. Despite the positive relationship, challenges remain in fully integrating sustainability principles across industries. The study provides implications for corporate governance, regulatory bodies, and investors seeking to enhance corporate sustainability through executive leadership.

Keywords : CEO Economic Certification; Corporate Governance; Sustainability Performance; Upper Echelons Theory

INTRODUCTION

Recent studies highlight the growing importance of sustainability in Indonesia's business sector, driven by global pressures and domestic regulations like POJK 51/2017 (Prisandani, 2023); (Adhariani & Du Toit, 2020). While compliance with sustainability reporting has increased, challenges remain in readability and consistency of interpretation (Adhariani & Du Toit, 2020); (Setyowati, 2023). Environmental, Social, and Governance (ESG) practices are positively associated with financial performance in Malaysian and Indonesian companies (Ismail et al., 2022); (Sugiarto et al., 2023). However, the relationship between ESG and financial performance in Indonesian banks shows mixed results (Gutierrez-Ponce & Wibowo, 2023). Small and medium enterprises (SMEs) lack specific sustainability reporting policies, highlighting a need for targeted regulations (Permatasari & Gunawan, 2023). Despite these challenges, Indonesian companies generally demonstrate satisfactory ESG performance, though improvements are needed across all ESG pillars (Saraswati et al., 2024). These findings underscore the evolving landscape of sustainability practices in Indonesia's business sector.

Indonesia's Financial Services Authority (OJK) has mandated sustainability reporting through POJK 51/2017, requiring companies to integrate sustainability into their operations and strategies (Adhariani & Du Toit, 2020); (Prisandani, 2023). This regulation aims to enhance transparency and accountability in social, environmental, and governance impacts (Permatasari & Gunawan, 2023). However, studies have found that sustainability reports often have low readability, potentially limiting their usefulness to stakeholders (Adhariani & Du Toit, 2020). Factors influencing sustainability reporting quality include institutional, cultural, and corporate aspects (Chang et al., 2019). While large companies are obligated to submit sustainability reports,



there is a lack of policies encouraging SMEs to do so (Permatasari & Gunawan, 2023). The implementation of sustainable finance regulations has shown high procedural compliance, but inconsistencies in interpreting "green" projects and limited regulatory oversight hinder tangible sustainability outcomes (Setyowati, 2023). Improved disclosure standards, risk management processes, and incentives for compliance are needed to enhance the effectiveness of sustainable finance initiatives (Setyowati, 2023).

In addition to POJK No. 51/2017, global demands stemming from international initiatives such as the Paris Agreement and the Sustainable Development Goals (SDGs) have increasingly influenced domestic policies. As a developing country rich in natural resources, Indonesia is responsible for contributing to global efforts to reduce greenhouse gas emissions, protect biodiversity, and improve social welfare. Against this backdrop, Indonesian companies are under increasing pressure to enhance their business practices to be more sustainable regarding resource usage, relationships with surrounding communities, and transparency in reporting.

Previous literature show role of CEOs in driving corporate sustainability and environmental performance. CEOs with higher education levels and international experience are more likely to invest in research and development (R&D) and promote environmental sustainability (Harymawan et al., 2020); (Sumarta et al., 2021). However, CFOs with accounting certifications tend to invest less in R&D, possibly due to risk aversion (Harymawan et al., 2020). CEO characteristics, including their background and expertise, influence corporate social responsibility (CSR) disclosure and sustainability practices (Ngelo et al., 2022); (Garcia-Sanchez et al., 2020). The impact of sustainability certifications on poverty reduction varies depending on local contexts (Santika et al., 2020). Good corporate governance, including board composition and education, affects sustainability performance across economic, social, and environmental dimensions (Tjahjadi et al., 2021). As sustainability regulations increase, CEOs with economic expertise are better equipped to make strategic decisions balancing financial and sustainability goals (Ribhan et al., 2024); (Mahran & Elamer, 2024).

The role of CEOs with economic backgrounds is becoming increasingly relevant in the context of the challenges faced by companies in balancing profitability with social and environmental responsibilities. Studies show that CEO attributes, including ability, civic engagement, and education, positively influence corporate sustainability performance (Garcia-Sanchez et al., 2020); (Cha et al., 2019); (Ghardallou, 2022). CEOs with strong sustainability orientations are better at analyzing risks and opportunities related to Environmental, Social, and Governance (ESG) factors, which can lead to improved economic performance (Taliento et al., 2019); (Alsayegh et al., 2020). The integration of management systems incorporating economic, social, and environmental standards has been found to enhance firms' economic performance, particularly in certain industries (Nadae et al., 2019). However, research gaps remain, especially regarding the impact of CEO psychological traits on environmental sustainability (Mahran & Elamer, 2024). Understanding how CEO attributes coevolve is crucial for enhancing scientific and practical understanding of sustainable CEO behavior (Abatecola & Cristofaro, 2019).

CEOs with economic certifications may be more focused on optimizing resources, which can ultimately lead to better EES performance. For example, a CEO with a strong understanding of macro and microeconomics may be more prudent in managing sustainability-oriented investments, such as investments in renewable energy or resource efficiency initiatives, which can reduce negative environmental impacts. Furthermore, they may guide the company toward making strategic decisions that enhance the company's value in the eyes of investors and strengthen relationships with local communities and other stakeholders.

Moreover, a CEO's economic background can be critical in increasing corporate transparency and accountability through adopting integrated reporting (Garcia-Sanchez et al., 2020). Integrated reporting is a reporting approach that combines financial and non-financial information in a holistic report. Its goal is to provide a more comprehensive view of the company's performance, including how it manages sustainability-related risks and opportunities. In Indonesia, adopting integrated reporting has yet to be widely mandated. Still, some companies have begun implementing it as part of their social responsibility to meet the expectations of international investors who are increasingly concerned with sustainability issues.

In this context, CEOs with economic certifications can play a key role in steering companies toward implementing high-quality integrated reporting that reflects the company's commitment to

sustainability. With a strong economic background, CEOs can understand how transparent and comprehensive reporting can help attract more investors, particularly those focused on sustainability. This can strengthen the company's position in the global market, given the growing trend of investment toward companies with strong ESG performance. Their potential to attract more sustainable investment is a reason for optimism about the future of sustainability in Indonesia.

However, despite the many benefits that can be derived from a CEO's economic expertise, the challenges in implementing sustainability in Indonesia still need to be addressed (Pasaribu, S. I. et al., 2020). Many companies still need help integrating sustainability principles into their daily operations, whether due to limited resources, a lack of understanding of the long-term benefits of sustainability, or pressure to achieve short-term profits (Haessler, P., 2020). Therefore, a CEO with deep economic knowledge becomes increasingly important in helping companies overcome these challenges while ensuring that the sustainability strategies they implement meet regulations and provide real added value to the company and its stakeholders.

Overall, the increasing regulations and global expectations surrounding sustainability in Indonesia have significantly transformed the business landscape. CEOs with economic certifications are crucial in leading companies toward more sustainable and responsible business models. Through data-driven decision-making and deep financial analysis, they can help companies achieve better sustainability performance, improve reporting transparency, and strengthen relationships with stakeholders. This study seeks to further explore how a CEO's economic certification influences a company's EES Score and how this expertise can be a critical factor in achieving sustainability in the future.

LITERATUR REVIEW

Upper Echelon Theory

Upper Echelons Theory (UET), introduced by Hambrick and Mason in 1984, posits that top executives' characteristics significantly influence organizational decisions and performance (Neely et al., 2020). Research has explored various aspects of UET, including executives' goal orientations (Pryor et al., 2019), psychological traits (Jumita et al., 2020), and demographic characteristics (Anessi-Pessina & Sicilia, 2020). Studies have examined UET's application in different contexts, such as environmental sustainability in the hotel industry (Hewa Heenipellage et al., 2022) and public sector accounting (Anessi-Pessina & Sicilia, 2020). While UET remains influential, it faces critiques regarding conceptual and methodological issues (Neely et al., 2020). The theory has branched into various niche streams, raising questions about its cohesiveness (White & Borgholthaus, 2022). Future research directions include exploring executives' construal-level shifts (Steinbach et al., 2019) and examining relationships among top executives, particularly between CEOs and CFOs.

Upper Echelons Theory posits that top management team (TMT) characteristics significantly influence organizational outcomes. Educational background shapes executives' decision-making, with CEOs from reputable universities tending to adopt lower leverage policies (Setiawan et al., 2024). TMT academic experience is associated with increased voluntary CSR disclosure (Ma et al., 2020). Professional experience impacts strategic choices, with longer CEO tenure negatively affecting employee motivation (Campos-Garcia & Zuniga-Vicente, 2019) but positively influencing firm performance and investment decisions (Ali et al., 2022). Diverse functional expertise in TMTs is linked to more distal cognitive search for adaptive solutions (Sidhu et al., 2019). TMT legal expertise shapes firms' involvement in lawsuits and adaptive strategies in legal contexts (Huang et al., 2023). Additionally, executives' attitudes, prior experience, and environmental exposure affect environmental sustainability practices in the hotel industry (Hewa Heenipellage et al., 2022). Gender also plays a role, with female managers demonstrating better knowledge protection in cooperative relationships (Raza-Ullah et al., 2023).

The upper-echelon theory of sustainability has also been explored in the Indonesian context. For example, Setiawan et al. (2024) found that CEOs with prestigious educational backgrounds in Indonesia are likelier to adopt lower leverage strategies, indirectly influencing sustainability outcomes. Furthermore, research in Indonesia's banking sector shows that CEO characteristics, such as international exposure and education level, significantly impact the bank's environmental performance (Sumarta et al., 2021). A study by Putra, A.A. et al. (2023) in Indonesian

manufacturing firms highlights that CEOs with economic or finance backgrounds are more proactive in integrating environmental and social considerations into strategic planning.

The leader's age is also thought to affect leadership style and decision-making. Older CEOs tend to be more risk-averse, investing less in R&D and focusing on exploitative innovation (Y. Li et al., 2021); (M. Li & Yang, 2019). Longer CEO tenures are associated with decreased corporate risk-taking and improved performance (Atayah et al., 2022). However, this relationship may be curvilinear, with moderate levels of authority promoting risk-taking (Tran, 2023). As CEOs age, firms experience lower investment, growth, and profitability, but higher survival rates (Belenzon et al., 2019). Leadership styles also impact innovation, with transformational and democratic approaches positively influencing innovation, while autocratic and transactional styles have negative effects (Costa et al., 2023). Human capital moderates the relationship between leadership and innovation (Costa et al., 2023). Additionally, executive age affects working capital management, with older executives investing more in working capital and paying suppliers sooner (Adhikari et al., 2021).

Beyond objective factors like education and experience, personal values and moral beliefs significantly shape strategic decisions. Leaders' personal motivation towards sustainability shapes their intellectual leadership and drives the adoption of sustainability strategies in organizations (Eide et al., 2020). Pro-environmental managers' personal values positively impact environmental disclosure quality, mediated by organizational structures (Luque-Vilchez et al., 2019). Entrepreneurs' mindsets, culture, and leadership are crucial for SME success and strategic decision-making (Lombardi et al., 2020). Different types of charismatic leadership, based on leader values, result in varying CSR orientations (Hu & Dutta, 2022). Incorporating sustainability in core business strategies can lead to improved financial performance (Eide et al., 2020). However, challenges exist in aligning moral values with benefit values in business decisions (Bolis et al., 2021). Stakeholder expectations and pressures also drive businesses to engage in CSR and environmentally friendly practices, potentially creating value for companies, society, and the environment (Camilleri, 2022).

According to Upper Echelons Theory, all of these personal characteristics form a cognitive filter that influences how top executives perceive the business world around them. This cognitive filter affects how they interpret opportunities and threats, process complex information, and make strategic decisions. As a result, decisions made at the highest level of a company are not purely the outcome of objective analysis but are shaped by the unique worldview formed by the executives' life experiences and personal values.

The theory has been extensively tested in various management and organizational studies, with ample empirical evidence supporting the notion that the personal characteristics of top executives significantly impact a company's strategic direction and performance outcomes. For instance, research has shown that companies led by executives with technical backgrounds tend to be more innovative regarding technology. In contrast, those led by executives with financial backgrounds are often more conservative in managing their finances. Furthermore, studies have indicated that leader characteristics can influence critical decisions such as global expansion, mergers and acquisitions, crisis responses, and investments in research and development (R&D) (Liu, Baohua et al. (2020).

Additionally, the Upper Echelons Theory helps explain variations in how companies respond to external pressures, such as regulatory changes or market demands. For example, leaders with extensive industry experience may be quicker to identify risks and opportunities arising from regulatory shifts. In contrast, leaders with more diverse backgrounds may be more innovative in responding to such changes (Li, Kailun et al., 2023). As such, the theory provides a robust framework for understanding how top executive decisions contribute to a company's success or failure in navigating changing business dynamics.

CEO Economic Certifications and EES Performance

The relationship between CEO economic certifications and EES Performance (Environmental, Economic, and Social Performance) can be explained by the CEO's economic knowledge and expertise influence the company's strategic decision-making. A CEO with an economic certification demonstrates a deep understanding of economic theory, financial management, and market dynamics, which are crucial for managing company resources effectively.

This knowledge aids the CEO in balancing the need to achieve solid economic performance while also considering the environmental and social impacts of their business decisions.

When it comes to Environmental Performance, CEOs with economic certifications offer a unique perspective. Their ability to formulate efficient policies for the use of natural resources and energy and their inclination towards adopting environmentally friendly technologies and investing in sustainability initiatives set them apart. This unique perspective allows them to better understand the long-term impact of such decisions on the company's profitability and environmental reputation, striking a balance between economic gains and environmental sustainability.

For Economic Performance, CEOs with economic certifications are better equipped to design optimal financial strategies. CEOs with recession experience demonstrate better risk management and financial strategies during economic downturns (Blank & Hadley, 2021). Outsider CEOs outperform insiders in overall performance, while CEOs with engineering degrees show higher environmental, social, and governance (ESG) performance (Garcia-Blandon et al., 2019). Firms with integrated management systems incorporating economic, social, and environmental standards exhibit better economic performance (Nadae et al., 2019). CEOs with finance qualifications enhance bank performance (Gupta & Mahakud, 2020). However, long-tenured CEOs and female CEOs are negatively associated with firm performance in some contexts (Kaur & Singh, 2019). CEO education and tenure positively moderate the relationship between corporate sustainability and financial performance (Ghardallou, 2022). Capital structure partially mediates the link between CEO characteristics and firm performance (Naseem et al., 2020). Lastly, CEOs have a significant effect on profitability and investment, with larger impacts observed in specific firm types and industries (Bennedsen et al., 2020).

Regarding Social Performance, CEOs with an economic background are more likely to focus on employee welfare, community engagement, and corporate social responsibility (CSR). With a better understanding of how company decisions affect internal and external stakeholders, these CEOs can promote policies supporting social equity, workforce well-being, and meaningful contributions to the broader community. They can guide the company to invest in CSR programs that enhance its image and have a tangible impact on local communities.

CEO Economic Certifications play a crucial role in ensuring that a company strikes an optimal balance between economic profitability and environmental and social responsibilities. The economic expertise that comes with these certifications enables CEOs to manage risks, maximize financial performance, and respond more effectively to sustainability challenges. This expertise is instrumental in enhancing the company's EES Performance, demonstrating the value of economic knowledge in achieving a balance between profitability and responsibility.

Upper Echelons Theory emphasizes that the personal characteristics of top executives directly influence how they perceive issues, make strategic decisions, and guide organizational performance. In this context, a CEO's economic certification can be viewed as a critical characteristic that affects their approach to sustainability and overall company performance.

According to the theory, a CEO with an economic certification will likely possess a "cognitive filter" that shapes their view on managing the company to achieve optimal financial, social, and environmental performance. With in-depth knowledge of economics, finance, and resource management, such CEOs are better equipped to navigate the complexities of modern business, which involve sustainability, profitability, and social responsibility. For example, a CEO with an economic background is more likely to understand the importance of integrating sustainability policies into business operations, seeing them not just as social responsibility but also as strategies for achieving long-term efficiency and cost savings, ultimately enhancing the company's Environmental, Economic, and Social (EES) Performance.

In the Indonesian corporate setting, where regulatory enforcement and stakeholder expectations regarding sustainability are still evolving, a CEO's economic expertise can provide a strategic edge. For instance, Usman, Berto. (2020) demonstrated that firms led by CEOs with economics or business certifications are more likely to disclose sustainability performance voluntarily in response to OJK regulations. Likewise, in state-owned enterprises, Trisyulianti, E. et al. (2022) show that economic-educated leaders tend to adopt balanced scorecard-based sustainability frameworks that align with national development goals.

According to the theory, a CEO's economic background can influence how they manage sustainability-related risks and opportunities. CEOs with economic certifications are not just

reactive, but proactive in understanding and managing financial risks related to climate change, resource scarcity, or stakeholder pressures. This strategic foresight allows them to adopt initiatives supporting environmental preservation, such as investments in green technologies or reducing carbon emissions, and to allocate resources wisely to balance the company's economic growth with positive social impacts, ultimately improving its EES Performance.

Overall, Upper Echelons Theory provides a solid theoretical framework for understanding how a CEO's economic certification influences their strategic decisions and, ultimately, the company's EES Performance. Through this theory, it becomes clear that CEOs with economic certifications can positively impact the company's direction in terms of sustainability, ensuring that the company focuses not only on financial gains but also on broader environmental and social responsibilities.

METHOD

In this study, the EES Score is the dependent variable, representing the company's performance in three key sustainability dimensions: Environmental, Economic, and Social. This score is meticulously designed to provide a comprehensive and balanced overview of corporate sustainability performance. It ensures that companies meet environmental and social standards and demonstrate economic accountability.

The EES Score is calculated by dividing the number of disclosed environmental, economic, and social items by the total number of items based on the Global Reporting Initiative (GRI) Index. The GRI is the measurement framework because it is the most widely adopted and internationally recognized standard for sustainability reporting, offering detailed, comparable, and sector-neutral guidelines (Camilleri, 2015). In Indonesia, the GRI framework is also commonly used by firms to comply with reporting expectations from global investors and local regulators (Meutia, I. et al., 2022). Its structured indicators enable consistency across reporting years and firms, making it a reliable benchmark for assessing sustainability disclosures.

For this study, four versions of the GRI are used to accommodate companies' reporting practices across time: GRI G3.0 (2010) with 123 items, GRI G3.1 (2011–2013) with 126 items, GRI 4.0 (2014–2016) with 126 items, and GRI Standard (2017–2021) with 141 items. The decision to focus on 2016–2021 is based on two key considerations. First, this period captures the growing momentum of sustainability practices in Indonesia following the introduction of POJK No. 51/POJK.03/2017, which mandates sustainability reporting for financial institutions, issuers, and public companies starting in the 2019 fiscal year. This regulation marks a significant institutional shift toward transparency and accountability in sustainability (Otoritas Jasa Keuangan, 2017). Second, the selected period offers adequate variation in firm-level reporting practices as companies transition from voluntary to mandatory sustainability disclosures—allowing for a richer analysis of strategic behaviour and performance.

The independent variable in this study is the CEO's economic certification experience, measured using a dummy variable that takes the value one if the CEO has relevant international certification or educational experience in economics and zero otherwise. Based on prior literature, a CEO's economic certification is beneficial because it reflects a deeper understanding of economic theory, financial management, and market dynamics. These capabilities enhance the CEO's strategic decision-making, resource allocation, and operational efficiency, ultimately contributing to improved performance across the environmental, economic, and social dimensions captured by the EES Score.

RESULT

The research data is derived from all companies listed on the Indonesia Stock Exchange (IDX) and those included in the Global Reporting Initiative (GRI) database from 2016 to 2021. This covers companies from various industrial sectors that meet the sustainability reporting and transparency criteria based on GRI guidelines and have officially published financial statements on the IDX within the specified timeframe. This study's total population and final sample consists of 654 firm-year observations.

Table 1. Statistic Descriptive

	Mean	Median	Minimum	Maximum
EES Score	0.393	0.380	0.000	1.022
CEO Economic Certification	0.024	0.000	0.000	1.000

Source: Processed Data (2024)

Table 1 presents the descriptive statistics of the two main variables in this study, namely EES Score and CEO Economic Certification. The EES Score, which reflects the company's environmental, economic, and social performance, has an average of 0.393 with a median of 0.380, indicating that most companies exhibit relatively consistent EES performance. The minimum value of the EES Score is 0.000, suggesting that some companies in the sample show no significant sustainability performance. In contrast, the maximum value reaches 1.022, reflecting solid EES performance in some companies.

Meanwhile, the CEO Economic Certification variable, which indicates whether the CEO holds an economic certification, has a very low average of 0.024, with a median of 0.000. This shows that the majority of CEOs in the sample do not have economic certifications, with a minimum value of 0.000 and a maximum of 1.000, meaning that only a few CEOs possess such certifications. This description not only indicates variability in the companies' EES performance but also raises a concern: the majority of CEOs in the sample do not have an economic certification background, which could potentially influence the relationship between CEO economic certification and the company's EES performance, and consequently, corporate governance.

Table 2. Pearson Correlation

	EES Score	CEO Economic Certification
EES Score	1.000	
CEO Economic Certifications	0.099** (0.011)	1.000

p-values in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 2 shows the Pearson correlation between EES Score and CEO Economic Certifications. The correlation results indicate a positive relationship of 0.099 between the two variables, which is significant at the $p < 0.05$ level. The *p*-value of 0.011 indicates that this relationship is statistically significant, suggesting that CEOs with economic certifications tend to be associated with higher EES Scores in their companies. Although the correlation is relatively small, this provides initial evidence that a CEO's financial background, mainly acquired through economic certification, may contribute to the company's sustainability performance in environmental, economic, and social (EES) aspects.

Table 3. T-Test

	CEO Economic Certification=0	CEO Economic Certification=1	Coef	t-value
EES Score	0.449	0.537	-0.088**	-2.541

Source: Processed Data (2024)

Table 3 presents the T-Test results comparing the EES Score between companies with CEOs with economic certifications (CEO Economic Certification=1) and those without economic certifications (CEO Economic Certification=0). Companies with CEOs lacking economic certifications have an average EES Score of 0.449, while companies with CEOs with economic certifications have a higher average EES Score of 0.537.

The coefficient difference between these two groups is -0.088, significant at the $p < 0.05$ level, with a *t*-value -2.541. This indicates that CEOs with economic certifications are associated with higher EES Scores, suggesting that the CEO's economic background positively impacts the company's sustainability performance in environmental, economic, and social aspects.

Table 4. Regression Result

	(1)
	EES Score
CEO Economic Certification	0.098***
	(2.71)
_cons	0.235***
	(7.68)
Industry FE	Yes
Year FE	Yes
r2	0.248
r2_a	0.232
N	654

t statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4 presents the regression results for the model explaining the relationship between CEO Economic Certification and EES Score. The coefficient for CEO Economic Certification is 0.098, which is significant at the $p < 0.01$ level with a *t*-statistic of 2.71. This indicates that an economic certification in a CEO has a significant positive relationship with the EES Score, suggesting that CEOs with economic certifications tend to perform better in environmental, economic, and social (EES) performance.

DISCUSSION

The positive relationship between CEO Economic Certification and EES Score can be explained by several factors related to the managerial abilities and deep economic understanding of CEOs with such certifications. Economic certification shows that a CEO has undergone formal education or training focused on monetary theory, financial management, and market dynamics. This expertise enables the CEO to manage the company more effectively and holistically, considering economic, social, and environmental factors.

Firstly, CEOs with a solid economic background tend to better understand the importance of sustainability performance as part of the company's long-term strategy. They may be more skilled in identifying opportunities to reduce operational costs through energy efficiency, better resource utilization, or environmentally friendly innovations to enhance the company's environmental performance. This aligns with global trends, where investors and other stakeholders consider companies with robust sustainability approaches more attractive.

Secondly, CEOs with economic certifications are also more likely to understand the financial impacts of the company's social performance, such as community engagement, employee well-being, and corporate social responsibility. With a better grasp of how social policies can affect reputation and long-term sustainability, they are more motivated to adopt practices that improve social performance, ultimately reflected in an enhanced EES Score.

Furthermore, an economic background equips CEOs with the ability to make more strategic and efficient decisions related to resource and risk management. This is crucial for maximizing long-term profits while maintaining responsibility toward the environment and society. The proactive nature of these CEOs, who view sustainability as an opportunity rather than an obligation, encourages the company to take more proactive initiatives to improve EES performance, thereby fostering a positive change in the company's sustainability performance.

However, this positive relationship does not occur in a vacuum. External factors such as corporate culture and stakeholder pressure may also significantly mediate or amplify this relationship (Ibrahim, M. N. et al., 2023). A company culture that values sustainability will likely reinforce the CEO's sustainability-oriented decisions, while a culture that prioritizes short-term financial gains may hinder them (Haessler, P., 2020). Likewise, pressures from stakeholders—including regulators, investors, consumers, and NGOs—can compel even economically trained CEOs to take bolder sustainability actions or, conversely, constrain their flexibility depending on the context (Gold, N. O. et al., 2022). These external dynamics shape how the CEO's expertise is

exercised within the organization and can influence how their economic knowledge translates into tangible improvements in EES performance.

This relationship can also be understood through the lens of Upper Echelons Theory, which posits that the personal characteristics of top executives, such as educational background, influence a company's strategic direction. CEOs with economic certifications deeply understand resource management, market dynamics, and economic principles, enabling them to integrate sustainability more effectively into the company's strategy. When supported by a conducive organizational culture and responsive stakeholder environment, these CEOs are even more empowered to align long-term sustainability goals with business performance. Therefore, internal characteristics and external contextual factors jointly contribute to shaping corporate sustainability outcomes as reflected in the EES Score.

CONCLUSION

This study highlights the critical role of CEO economic certifications in influencing corporate sustainability performance, particularly in environmental, economic, and social (EES) aspects. The findings reveal a significant positive relationship between CEO economic expertise and higher EES Scores, suggesting that CEOs with economic backgrounds are better equipped to implement sustainability strategies, enhance transparency, and optimize resource management. These results align with the Upper Echelons Theory, which posits that executive characteristics shape corporate decision-making and performance. The study also underscores the growing importance of sustainability in Indonesia, driven by regulatory frameworks like POJK 51/2017 and global market expectations.

While the findings provide strong evidence of the benefits of CEO economic expertise in improving sustainability outcomes, challenges remain in integrating sustainability principles across diverse industries. Therefore, regulators are encouraged to support leadership development policies that promote economic and sustainability literacy among corporate executives. This can be done by introducing mandatory training modules on sustainable finance for listed companies, offering incentives for boards that include sustainability-certified leaders, and strengthening disclosure requirements aligned with global standards such as the GRI or IFRS S2. Such regulatory initiatives will help institutionalize sustainability practices and ensure leadership readiness in achieving national sustainable development goals.

Future research should explore additional CEO attributes, industry-specific dynamics, and long-term impacts to refine further corporate governance strategies that balance profitability with sustainable development.

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