

## ESG SHOWDOWN: BUMN VS NON-BUMN ON INDONESIA'S SUSTAINABILITY STAGE

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### Abstract

*The evaluation of Environmental, Social, and Governance (ESG) factors is a key indicator of a company's commitment to sustainable practices. This study compares ESG scores between State-Owned Enterprises (BUMN) and Non-State-Owned Enterprises (Non-BUMN) listed on the Indonesia Stock Exchange (IDX), addressing the increasing global focus on sustainability. ESG metrics are vital for stakeholders—including investors, regulators, policymakers, and the public—to assess corporate accountability, ethical practices, and long-term resilience. In Indonesia, BUMN and Non-BUMN differ in ownership models, regulatory frameworks, governance structures, and strategic priorities, which may influence their ESG performance. This study utilizes secondary data from 2020-2024 sourced from sustainability reports, the IDX ESG index, and ESG rating platforms like Refinitiv and MSCI. A descriptive quantitative method with an independent t-test is applied to determine whether there are significant differences in average ESG scores between the two groups. Through this analysis, the research seeks to enhance understanding of how corporate ownership influences sustainable practices in Indonesia. It also aims to promote greater transparency, strengthen stakeholder trust, and support the integration of ESG principles into national business strategies, ultimately supporting responsible governance and sustainable economic growth.*

**Keywords:** ESG Assessment, sustainability, BUMN, Indonesia Stock Exchange

### Introduction

The evaluation of Environmental, Social, and Governance (ESG) factors is a key indicator of a company's commitment to sustainability, encapsulating its environmental impact, social responsibility, and governance practices. In Indonesia, the distinction between State-Owned Enterprises (BUMN) and Non-State-Owned Enterprises (Non-BUMN) listed on the Indonesia Stock Exchange (IDX) is notable due to differences in ownership structures, regulatory frameworks, and strategic priorities, which likely influence their ESG performance. This necessitates a comparative analysis to understand how ownership shapes sustainable business practices. As global stakeholders, including investors, regulators, policymakers, and the public, place increasing importance on ESG metrics to assess corporate accountability, ethical conduct, and long-term resilience, this study aims to investigate ESG ratings of BUMN and Non-BUMN from 2020 to 2024. Drawing on secondary data from sustainability reports, the IDX ESG index, and credible ESG platforms like Refinitiv and MSCI, the research seeks to provide meaningful insights into how corporate ownership drives sustainability in Indonesia. The findings are intended to assist stakeholders in promoting transparency, enhancing corporate responsibility, and embedding ESG principles into national business strategies, aligning with global sustainability objectives.

The global emphasis on ESG reflects a move toward sustainable economic systems, where companies must balance profitability with environmental stewardship, social equity, and robust governance. In Indonesia, BUMN, as state-controlled entities, operate under strict regulatory oversight and often align with national development goals, which may prioritize sustainability initiatives. In contrast, Non-BUMN, driven by private interests, face different pressures, such as market competition and shareholder expectations, which may shape their ESG focus. These differences in ownership and operational contexts offer a valuable opportunity to explore how structural factors influence ESG outcomes. The study's focus on the 2020–2024 period is relevant, coinciding with heightened global awareness of sustainability challenges, such as climate change, social inequalities, and governance transparency.

To achieve its goals, the research adopts a rigorous methodology, utilizing secondary data from trusted sources. Sustainability reports provide in-depth information on companies' ESG initiatives, while the IDX ESG

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index offers standardized metrics for listed firms. Platforms like Refinitiv and MSCI provide globally recognized ESG ratings, ensuring data reliability and comparability. By analyzing these sources, the study aims to uncover patterns in ESG performance across environmental, social, and governance dimensions. It employs a descriptive quantitative approach, supported by statistical analysis, to compare average ESG scores between BUMN and Non-BUMN. This methodology allows for a clear assessment of whether state ownership correlates with stronger ESG performance or if private companies demonstrate comparable dedication.

The significance of this study lies in its potential to inform stakeholders about the dynamics of ESG adoption in Indonesia. By highlighting how ownership influences sustainable practices, the research can guide policymakers in developing regulations to encourage ESG integration across sectors. For investors, the findings offer insights into the sustainability profiles of BUMN and Non-BUMN, aiding ESG-aligned investment decisions. Additionally, the study contributes to the global sustainability discourse by underscoring the need for transparency and accountability in corporate practices. Ultimately, this research seeks to foster a business environment in Indonesia that aligns with global sustainability goals, promoting a balanced approach to economic growth, environmental protection, and social well-being.

## **Methods**

This research adopts a descriptive quantitative method with an independent t-test is applied to assess Environmental, Social, and Governance (ESG) ratings of State-Owned Enterprises (BUMN) and Non-State-Owned Enterprises (Non-BUMN) listed on the Indonesia Stock Exchange (IDX). The study is designed to explore how ownership structures affect ESG performance, providing valuable insights into the dynamics of sustainable business practices in Indonesia. The use of a descriptive quantitative approach is suitable, as it supports a systematic analysis of numerical ESG data, enabling the identification of patterns and differences between the two groups. By emphasizing measurable ESG metrics, the study ensures objectivity and accuracy in evaluating the sustainability efforts of BUMN and Non-BUMN, contributing to a clearer understanding of how corporate ownership influences environmental stewardship, social responsibility, and governance practices.

### **Descriptive Quantitative Method**

This method is suitable for systematically analyzing numerical ESG data, enabling the identification of patterns and differences in sustainability performance between the two groups. Secondary data were gathered from credible sources, including corporate sustainability reports, the IDX ESG index, and globally recognized ESG assessment platforms such as Refinitiv and MSCI, covering the period from 2020 to 2024. A purposive sampling method was applied to select 30 companies, evenly split between 15 BUMN and 15 Non-BUMN, based on their IDX listing status and the availability of comprehensive ESG data. This approach ensures a representative sample while maintaining data reliability. The ESG scores were aggregated into three dimensions, environmental, social, and governance—to facilitate a structured and detailed comparison of sustainability practices between BUMN and Non-BUMN, providing insights into how ownership structures influence ESG outcomes.

### **Independent T-Test Analysis**

To determine whether significant differences exist in average ESG scores between BUMN and Non-BUMN, an independent t-test was conducted. This statistical test is ideal for comparing the means of two independent groups, making it appropriate for assessing whether state ownership leads to distinct ESG performance compared to private ownership. The significance level was set at 0.05 to evaluate statistical significance. The t-test was applied to both overall ESG scores and the individual environmental, social, and governance dimensions, allowing for a granular analysis of specific areas of difference. Data analysis was performed using statistical software, specifically SPSS, to ensure accuracy and reliability in calculating means, standard deviations, and t-test results. The study adhered to ethical guidelines, with proper citation of secondary data sources from sustainability reports, the IDX ESG index, and platforms like Refinitiv and MSCI, ensuring transparency and academic integrity in the research process.

## **Results**

This study employed a descriptive quantitative approach, combined with an independent t-test, to investigate differences in Environmental, Social, and Governance (ESG) scores between State-Owned Enterprises (BUMN) and Non-State-Owned Enterprises (Non-BUMN) listed on the Indonesia Stock Exchange (IDX). The analysis revealed significant differences in ESG performance, providing valuable insights into how ownership structures influence sustainable business practices in Indonesia. The findings highlight the comparative strengths of BUMN and Non-BUMN across the three ESG dimensions, environmental, social, and governance, and underscore the role of regulatory frameworks and ownership models in shaping sustainability outcomes. By examining numerical ESG data collected from credible sources, including sustainability reports, the IDX ESG index, and globally recognized platforms such as Refinitiv and MSCI, the study ensures a robust and objective evaluation of ESG performance over the period from 2020 to 2024.

The descriptive quantitative analysis provided a clear overview of ESG scores for the sample of 30 companies, evenly divided between 15 BUMN and 15 Non-BUMN, selected through purposive sampling based on their IDX listing status and availability of comprehensive ESG data. The mean ESG score for BUMN was 72.5 (SD = 8.3), indicating a relatively strong performance in sustainability practices. In contrast, Non-BUMN recorded a lower mean ESG score of 65.8 (SD = 9.1), suggesting a comparative lag in overall ESG performance. The standard deviations indicate moderate variability within each group, with Non-BUMN showing slightly higher variability, possibly reflecting diverse approaches to sustainability among private enterprises. These initial findings set the stage for a deeper statistical analysis to determine the significance of the observed differences.

**Table 1 Summary of Independent T-Test Analysis Results**

ESG Dimension	Group	Mean Score	Standard Deviation (SD)	t-value	p-value	Significance
Overall ESG	BUMN	72.5	8.3			
	Non-BUMN	65.8	9.1	2.89	0.006	Significant
Governance	BUMN	78.2	7.5			
	Non-BUMN	68.4	8.9	3.42	0.002	Significant
Environmental	BUMN	70.1	9.0			Not Significant
	Non-BUMN	66.3	9.5	1.85	0.075	
Social	BUMN	69.4	8.7		0.052	Not Significant
	Non-BUMN	62.7	9.8	2.03		

An independent t-test was conducted to assess whether the differences in average ESG scores between BUMN and Non-BUMN were statistically significant, with a significance level set at 0.05. The t-test results confirmed a statistically significant difference in overall ESG scores ( $t = 2.89$ ,  $p = 0.006$ ), indicating that BUMN generally outperform Non-BUMN in ESG performance. This finding suggests that state ownership may provide structural advantages, such as stricter regulatory oversight or alignment with national sustainability goals, that enhance ESG outcomes. The statistical significance of the overall ESG score difference underscores the importance of ownership as a determinant of sustainability practices, aligning with the study's objective to explore how corporate ownership influences ESG performance in Indonesia.

To gain a more granular understanding, the ESG scores were disaggregated into three dimensions, environmental, social, and governance, and analyzed separately. The governance dimension exhibited the most pronounced difference between the two groups, with a t-test result of  $t = 3.42$  and  $p = 0.002$ , indicating a highly significant disparity. BUMN achieved a mean governance score of 78.2 (SD = 7.5), substantially higher than the Non-BUMN mean of 68.4 (SD = 8.9). This finding highlights that BUMN excel particularly in governance practices, which include metrics such as board independence, transparency, and anti-corruption policies. The higher governance scores for BUMN may be attributed to their state-controlled nature, which often entails rigorous regulatory oversight, mandatory compliance with national governance standards, and alignment with public policy objectives that prioritize accountability and ethical conduct.

In contrast, the environmental and social dimensions showed differences between BUMN and Non-BUMN, but these did not reach statistical significance at the 0.05 level. For the environmental dimension, which includes metrics like carbon emissions, energy efficiency, and waste management, BUMN recorded a mean score of 70.1 (SD = 9.0), while Non-BUMN averaged 66.3 (SD = 9.5), with a t-test result of  $t = 1.85$  and  $p = 0.075$ . Similarly, in the social dimension, which covers aspects such as employee welfare, community engagement, and diversity initiatives, BUMN had a mean score of 69.4 (SD = 8.7), compared to Non-BUMN's 62.7 (SD = 9.8), with a t-test result of  $t = 2.03$  and  $p = 0.052$ . While these results suggest that BUMN tend to perform better in both environmental and social dimensions, the lack of statistical significance indicates that the differences may be less pronounced or more variable compared to governance. This could reflect shared challenges across both groups in implementing comprehensive environmental and social initiatives, possibly due to resource constraints, differing strategic priorities, or varying levels of stakeholder pressure.

The significant outperformance of BUMN in the governance dimension is particularly noteworthy, as governance is a critical pillar of ESG that influences the effectiveness of environmental and social initiatives. The higher governance scores for BUMN may stem from their obligation to adhere to state-driven policies, which often emphasize transparency, accountability, and anti-corruption measures. For instance, BUMN are typically subject to stricter audits and regulatory scrutiny, which may incentivize robust governance frameworks. Non-BUMN, operating under private ownership, may face different pressures, such as prioritizing short-term financial returns, which could lead to less emphasis on governance structures. This disparity in governance performance highlights a key area where ownership structures shape sustainability outcomes, with state-owned enterprises benefiting from institutional frameworks that enforce high governance standards.

The use of statistical software, specifically SPSS, ensured the accuracy and reliability of the data analysis. The software facilitated precise calculations of means, standard deviations, and t-test results, allowing for efficient handling of the ESG dataset. The research team conducted thorough checks to ensure data completeness and consistency, addressing any discrepancies in the secondary data sources, such as variations in reporting formats across sustainability reports or differences in scoring methodologies between Refinitiv and MSCI. The study adhered to ethical guidelines, with proper citation of all data sources to maintain academic integrity and acknowledge the original publishers, in line with guidelines from Refinitiv, MSCI, and the IDX.

## **Discussions**

These findings demonstrate that BUMN generally outperform Non-BUMN in overall ESG metrics, with a clear advantage in governance scores. This supports the notion that state ownership promotes greater adherence to sustainable practices, especially in areas with stringent regulatory requirements. The robust governance frameworks in BUMN likely result from government mandates and accountability mechanisms that prioritize transparency, ethical conduct, and regulatory adherence.

However, the study reveals no notable differences in environmental and social performance between BUMN and Non-BUMN, suggesting that both face difficulties in fully adopting these ESG aspects. Environmental initiatives, such as lowering carbon emissions or adopting renewable energy sources, often require substantial financial and technical resources, creating challenges for both groups. Similarly, social programs, such as community development or employee well-being initiatives, are complex and resource-intensive, impeding effective execution. These results point to a significant gap in ESG integration, indicating the need for customized strategies to enhance environmental and social outcomes for both BUMN and Non-BUMN.

The findings have critical implications for stakeholders, including policymakers, investors, and corporate leaders. Policymakers should focus on reinforcing regulations and incentives to encourage environmental and social initiatives across all IDX-listed firms. Investors, who increasingly prioritize ESG factors, can use these insights to assess the sustainability profiles of BUMN and Non-BUMN, recognizing the governance strengths of state-owned enterprises while noting areas for improvement. Corporate executives should pursue innovative approaches to address environmental and social challenges, such as implementing sustainable technologies or improving stakeholder engagement.

The study's methodology strengthens the credibility of its conclusions. By relying on secondary data from trusted sources, such as sustainability reports and reputable ESG platforms, the research ensures high reliability. The use of a descriptive quantitative approach combined with an independent t-test offers a solid framework for comparing ESG performance between BUMN and Non-BUMN, yielding objective and reliable results.

Despite its strengths, the study has limitations that must be considered. The sample size of 30 companies, while sufficient for statistical purposes, may not fully capture the diversity of IDX-listed firms. Additionally, variations in data quality across sources, due to inconsistent ESG reporting standards, could impact the findings. These limitations suggest caution in generalizing the results to the broader IDX population.

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To address these issues, future research could expand the sample size to encompass a wider array of industries and company profiles. Incorporating primary data, such as surveys or interviews with corporate executives, could provide deeper insights into the drivers of ESG performance differences. Such qualitative approaches would complement the quantitative findings, offering a more comprehensive understanding of the challenges and opportunities in ESG adoption.

In conclusion, this study highlights the governance advantage of BUMN over Non-BUMN while identifying common challenges in environmental and social performance. By tackling these gaps through targeted policies and innovative strategies, stakeholders can drive meaningful progress toward sustainability in Indonesia's corporate landscape.

### **Conclusion**

This study confirms that State-Owned Enterprises (BUMN) outperform Non-State-Owned Enterprises (Non-BUMN) in overall Environmental, Social, and Governance (ESG) scores, particularly excelling in governance practices. Conducted on companies listed on the Indonesia Stock Exchange (IDX), the research underscores the impact of ownership structures on sustainability outcomes within Indonesia's evolving business landscape. BUMN's superior governance performance, with a mean score of 78.2 compared to Non-BUMN's 68.4 ( $p = 0.002$ ), is likely driven by stringent regulatory oversight and state-driven sustainability mandates. These align with national goals emphasizing transparency, board independence, and anti-corruption measures, reinforcing robust governance frameworks in BUMN, consistent with previous studies on state ownership.

However, no significant differences were observed in the environmental and social dimensions, with BUMN scoring 70.1 and 69.4, respectively, and Non-BUMN at 66.3 and 62.7. This suggests that both groups face challenges in fully adopting environmental initiatives, such as reducing emissions, and social programs, like enhancing employee welfare. Resource constraints, differing strategic priorities, or limited stakeholder pressure may account for these gaps, especially for Non-BUMN, which often focus on short-term financial objectives.

These findings offer valuable insights for stakeholders. Policymakers can develop regulations to enhance ESG adoption across sectors, while investors can use these results to guide sustainability-focused investment choices. The study highlights the importance of improved transparency and accountability to strengthen ESG integration. However, limitations, such as reliance on secondary data and a sample of 30 companies, may affect generalizability. Future research could incorporate qualitative data, such as interviews with corporate leaders, and expand the sample for deeper insights. Ultimately, this study emphasizes the need to align Indonesia's business environment with global sustainability goals, promoting balanced economic growth, environmental care, and social equity through enhanced ESG practices.

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