



Carbon Emission Disclosure, Capital Expenditure, and Institutional Ownership on Company Value: A Literature Review

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ABSTRACT

This literature review explores the impact of carbon emission disclosure on company value, synthesizing findings from eight recent peer-reviewed articles published between 2021 and 2023. The analysis reveals a consistent positive relationship between carbon emission disclosure and firm value, driven by increased investor confidence and enhanced market responses. Institutional investors play a crucial role in this dynamic, promoting sustainable practices and holding companies accountable for their environmental impact. Additionally, the review highlights the multifaceted relationship between capital expenditure and firm value, influenced by factors such as market competition and information asymmetry. Capital investments, particularly in sustainable practices, are shown to enhance transparency and corporate governance, further boosting firm valuation. The findings underscore the growing importance of environmental, social, and governance (ESG) criteria in investment decisions, suggesting that companies engaging in proactive carbon emission disclosure and sustainability investments are better positioned to attract responsible investors and achieve long-term market success. This comprehensive review provides valuable insights for policymakers, investors, and corporate leaders, emphasizing the strategic significance of carbon emission transparency and sustainable investments in fostering sustainable economic growth and improving company value.

INTRODUCTION

The value of a company is a critical concept for investors, serving as an indicator of the market's overall assessment of the company. A higher company value typically translates to greater shareholder wealth, as evidenced by an increase in the company's stock price. Consequently, maximizing shareholder wealth is often achieved through strategies that enhance the company's stock price. To realize this goal, investors typically entrust the management of the company to professional managers or commissioners (Yusmaniati et al., 2020). One emerging and significant factor influencing company value is carbon emissions, often referred to as carbon risk in academic literature. The impact of carbon emissions is multifaceted, affecting various financial decisions and increasingly becoming a focal point in contemporary financial literature. The wide-ranging





implications of carbon risk have spurred extensive research on its effects on corporate performance and investor decision-making (Bolton & Kacperczyk, 2021; Krueger et al., 2020).

Carbon emission disclosure plays a crucial role in determining a company's value. Empirical evidence indicates that companies that disclose their carbon emissions tend to have a higher market value compared to those that do not. For instance, Matsumura et al. (2014) found that the market value of companies disclosing their carbon emissions is, on average, \$23 billion higher than that of non-disclosing companies. This positive correlation between company value and carbon emission disclosure is further supported by findings that voluntary carbon emission reductions are also positively associated with company value. Sun et al. (2024) observed that for each additional ton of carbon emission reduction, the company value increased by approximately 340 yuan (equivalent to 44 euros or 52 US dollars). Further empirical evidence suggests that companies with better carbon performance, characterized by lower Carbon Emission Intensity (CEN), are able to meet their capital needs at lower costs (Bui et al., 2020; Kim et al., 2015). Despite the clear benefits, carbon emission disclosure remains largely voluntary in the valuation of company value (Saka & Oshika, 2014).

The importance of carbon emission information extends beyond financial metrics to influence investor behavior. Epstein and Friedman (1994) found that social and environmental activities reported in a company's annual report attract individual investors. One form of investor response is the increased interest in purchasing the company's shares, leading to higher stock demand and price fluctuations. Consequently, a company's efforts to reduce carbon dioxide emissions can significantly enhance its value in the eyes of investors. Therefore, the growing importance of carbon emission disclosure in the financial valuation of companies highlights a critical area of corporate governance and investor relations. As the financial and environmental implications of carbon emissions become more pronounced, understanding the interplay between carbon risk, emission disclosure, and company value is essential. This literature review aims to explore these relationships comprehensively, providing insights into how carbon emissions and their disclosure impact company value, investor behavior, and overall market perception.

METHOD

For this literature review, a qualitative approach was employed to synthesize and analyze the existing body of research on the relationship between carbon emissions, their disclosure, and company value. The review focused on articles published between 2021 and 2023, ensuring the inclusion of the most recent and relevant findings. The sources were carefully selected from reputable, peer-reviewed academic journals known for their rigorous publication standards and impact in the field of finance and environmental studies. The methodology involved a systematic search of databases using keywords related to carbon emissions, disclosure practices, and company valuation. Each article was reviewed to extract pertinent data, themes, and findings, which were then critically analyzed to identify patterns, trends, and gaps in the current literature. This approach provided a comprehensive understanding of the contemporary discourse on carbon emissions

RESULTS AND DISCUSSION

1. Article identity

According to the literature review we've conducted, we found eight articles related which are:

Table 1. Articles Related to The Literature Review

Article	Author	Journal	Citation(s)
1	(Ullah et al., 2023)	The Quarterly Review of Economics and Finance	37
2	(Satt et al., 2022)	Macroeconomics and Finance in Emerging Market Economies	3
3	(Döring et al., 2021)	Journal of International Business Studies	71
4	(Acar et al., 2021)	International Journal of Climate Change Strategies and Management	45
5	(Safiullah et al., 2022)	Energy Economics	40





6	(Karim et al., 2021)24/07/2024 18:59:00	Journal of Environmental Management	142
7	(Ratmono et al., 2020)	International Journal of Energy Economics and Policy	28
8	(Hardiansyah et al., 2021)	The Journal of Asian Finance, Economics and Business	103

Source : Research Data

2. Methodology

According to the literature review we've conducted, the methodology for each journal is:

Table 2. Methodology For Each Journal

Article	Theory Used	Object
1	Theory of investment	UK domiciled oil and gas companies
2	Theory of legitimacy	MENA region
3	Theory of multiple block holders	34 countries
4	Theory of legitimacy and stakeholder	72 countries
5	Theory of institutional	US countries
6	Theory of legitimacy and signalling	UK firms
7	Theory of legitimacy	Public company in Indonesia
8	Theory of legitimacy, stakeholder, and signalling	ISRA receivers

Source : Research Data

The literature review encompasses a diverse range of methodologies and theoretical frameworks applied across various regions and industries. The first article employs the Theory of Investment to analyze UK domiciled oil and gas companies, providing insights into how investment strategies and financial decisions within this sector influence corporate performance and sustainability. The second article uses the Theory of Legitimacy to examine companies in the MENA (Middle East and North Africa) region, highlighting the importance of maintaining social and cultural legitimacy to ensure corporate survival and growth in this diverse geopolitical landscape. The third article adopts the Theory of Multiple Block Holders to study firms across 34 countries, shedding light on the impact of multiple large shareholders on corporate governance and performance.

Further expanding the geographical scope, the fourth article integrates the Theory of Legitimacy and Stakeholder Theory to analyze companies in 72 countries, emphasizing the role of both social legitimacy and stakeholder engagement in global corporate practices. The fifth article applies the Theory of Institutional to US companies, focusing on how institutional pressures shape corporate behavior and disclosure practices. The sixth article uses the Theory of Legitimacy and Signalling Theory to study UK firms, exploring how companies signal their legitimacy through various disclosure mechanisms. In the Indonesian context, the seventh article solely utilizes the Theory of Legitimacy to examine a public company, providing a case study on how legitimacy influences corporate strategies in emerging markets. Lastly, the eighth article combines the Theories of Legitimacy, Stakeholder, and Signalling to investigate ISRA receivers, offering a multifaceted perspective on how these entities manage legitimacy, stakeholder relationships, and information signalling in their operations.

3. Article Result

Table 3. Articles Result

Article	Title	Result
1	Capital expenditures, corporate hedging and firm	The results show that capital expenditure itself increases company value
2	Capital expenditure and firm value in the MENA region: the	Empirical testing shows that in markets with high product competition, capital expenditures have a negative effect on





	role of market competition and information asymmetry	company value, whereas in conditions of high information asymmetry, the effect is positive.
3	Institutional investment horizons and firm valuation around the world	They find a positive relationship between institutional ownership and firm value driven by short-term institutional investors
4	Does ownership type affect environmental disclosure?	This research finds that companies with higher state ownership have higher environmental disclosure and higher institutional ownership has a negative effect on environmental disclosure.
5	Do all institutional investors care about corporate carbon emissions?`	Institutional investors help reduce carbon emissions by reducing energy consumption. Institutional investors' proximal monitoring influences companies to achieve better carbon performance. The research results show that the benefit for institutional investors from reducing carbon emissions is higher company value.
6	A novel measure of corporate carbon emission disclosure, the effect of capital expenditures and corporate governance	The research results show a positive relationship between capital expenditure and carbon emissions disclosure
7	Effect of Carbon Performance, Company Characteristics and Environmental Performance on Carbon Emission Disclosure: Evidence from Indonesia	The research results show that company size and capital expenditure have a positive and significant effect on carbon emissions disclosure
8	The Effect of Carbon Emission Disclosure on Firm Value: Environmental Performance and Industrial Type	The research results show that disclosure of carbon emissions has a positive and significant effect on company value because disclosure of carbon emissions is a form of company concern for the environment which is responded positively by the market and is a basis for investors to consider in assessing the company's sustainability.

Source : Research Data

4. Institutional Ownership, Capital expenditure, Carbon emission, and Company value

Recent research has explored various dimensions of corporate practices and their impacts on firm value and environmental disclosures. Ullah et al. (2023) highlight that capital expenditures independently increase company value, underscoring their strategic importance in enhancing firm performance. Conversely, Satt et al. (2022) investigate capital expenditures within the MENA region, revealing contrasting effects influenced by market competition and information asymmetry. They find that in highly competitive markets, such expenditures may negatively impact company value, whereas in contexts marked by high information asymmetry, the effect tends to be positive. These findings suggest that the impact of capital expenditures on firm value is nuanced and context-dependent, influenced by the specific market dynamics at play.

On the environmental front, several studies delve into the relationship between corporate behaviors and environmental disclosures. For instance, Acar et al. (2021) find that companies with higher state ownership tend to disclose more about their environmental practices, indicating a positive relationship between ownership type and environmental transparency. Safiullah et al. (2022) explore how institutional investors influence corporate carbon emissions, highlighting that their monitoring efforts lead to reduced energy consumption and improved carbon performance, thereby enhancing company value. Moreover, research by Hardiansyah et al. (2021) underscores the positive impact of carbon emission disclosure on firm value, suggesting that transparent environmental practices are valued by the market and contribute to sustainable investor assessments. These studies collectively emphasize the dual role of corporate practices—both in financial valuation and environmental stewardship—in shaping contemporary business strategies and market perceptions.





5. Institutional Ownership of company value

The relationship between institutional ownership and company value is a complex and multifaceted topic that has garnered significant attention in the academic literature. Several studies highlight the influential role that institutional investors play in shaping corporate behavior and enhancing firm value. For instance, the third article in the literature review indicates a positive relationship between institutional ownership and firm value, driven particularly by short-term institutional investors. This finding suggests that institutional investors, especially those with a shorter investment horizon, are more actively involved in corporate governance, exerting pressure on management to adopt strategies that enhance shareholder value in the short term. This active involvement often leads to more efficient operations, better resource allocation, and increased transparency, which collectively contribute to higher firm valuations.

Additionally, the fifth article underscores the role of institutional investors in reducing carbon emissions by influencing companies to adopt more sustainable practices. The research shows that institutional investors' proximal monitoring encourages firms to achieve better carbon performance, which not only benefits the environment but also enhances company value. This demonstrates that institutional investors can drive positive change by prioritizing sustainability and environmental performance, which are increasingly important factors for investors and other stakeholders. Moreover, by reducing energy consumption and improving carbon performance, companies can realize cost savings and operational efficiencies that further boost their financial performance and market valuation. Thus, the presence and influence of institutional investors are crucial for fostering corporate practices that align with broader environmental, social, and governance (ESG) criteria, ultimately leading to increased firm value.

6. Capital expenditure on company value

The relationship between capital expenditure and company value is multifaceted and varies across different market conditions and institutional settings. The first article in the literature review demonstrates a straightforward positive impact of capital expenditure on company value, indicating that investment in capital assets can enhance a company's operational capacity and overall market performance. This finding suggests that capital expenditures are perceived positively by investors, as they are likely associated with growth opportunities and long-term profitability. In contrast, the second article highlights the complex dynamics within the MENA region, where high product market competition can lead to a negative effect of capital expenditures on company value. This negative effect can be attributed to the increased risk and pressure on profit margins in highly competitive markets. However, the same study also indicates that under conditions of high information asymmetry, capital expenditures have a positive impact on company value. This suggests that in environments where information is scarce or unevenly distributed, capital expenditure signals a firm's commitment to growth and development, thus enhancing investor confidence.

The third article provides a global perspective by examining institutional investment horizons and firm valuation, revealing that short-term institutional investors positively influence firm value. This finding implies that short-term investors may favor companies that actively engage in capital expenditure as it signals immediate growth potential. Furthermore, the sixth article supports the notion of a positive relationship between capital expenditure and corporate carbon emissions disclosure. This correlation suggests that companies investing in capital assets are also likely to enhance their transparency and sustainability practices, which can positively affect their market value. The seventh article corroborates this by showing that both company size and capital expenditure significantly boost carbon emissions disclosure in Indonesia. The eighth article further reinforces the positive linkage between carbon emission disclosure, driven by capital expenditure, and firm value. It demonstrates that investors value environmental responsibility, as evidenced by their positive response to carbon emission disclosures. Overall, these findings underscore the importance of contextual factors such as market competition, information asymmetry, and institutional investor behavior in shaping the impact of capital expenditure on company value.

7. Carbon emission disclosure on company value

The relationship between carbon emission disclosure and company value has been a focal point of recent research, with multiple studies illustrating its significant impact. The empirical evidence suggests that





companies engaging in carbon emission disclosure tend to experience a positive market response, thereby enhancing their firm value. For instance, one study found that institutional investors play a crucial role in reducing carbon emissions, primarily by encouraging better energy consumption practices, which in turn leads to an increase in company value. This is largely attributed to the proximal monitoring by these investors, who push companies towards better carbon performance, thus signaling to the market that the company is committed to sustainable practices. Another study highlights that the disclosure of carbon emissions positively correlates with firm value as it reflects the company's concern for the environment, which is perceived positively by the market and serves as a key consideration for investors assessing the company's long-term sustainability.

Moreover, the positive relationship between carbon emission disclosure and firm value is reinforced by the notion that such transparency can mitigate risks associated with environmental regulations and enhance the company's reputation among stakeholders. Companies that openly disclose their carbon emissions are perceived as being more accountable and proactive in addressing environmental issues, which can lead to increased trust and support from customers, investors, and regulators. This proactive stance can also preempt regulatory pressures and potential penalties, thereby safeguarding the company's financial health and stability. In essence, the act of disclosing carbon emissions not only serves as a demonstration of environmental responsibility but also as a strategic move to improve firm valuation by aligning with the growing market preference for sustainability and responsible corporate behavior.

CONCLUSION

This literature review underscores the significant role that carbon emission disclosure plays in enhancing company value. The studies reviewed consistently demonstrate that companies which actively disclose their carbon emissions tend to receive positive market responses, reflecting increased investor confidence and improved firm valuation. This relationship is particularly influenced by institutional investors who prioritize sustainability and hold companies accountable for their environmental impact. The transparency associated with carbon emission disclosure not only bolsters a company's reputation but also mitigates risks related to regulatory compliance and environmental accountability. Furthermore, the positive impact of capital expenditure on firm value, especially in contexts with high information asymmetry, underscores the importance of strategic investments in sustainable practices. Overall, the findings highlight the growing importance of environmental, social, and governance (ESG) criteria in contemporary investment decisions, suggesting that companies that proactively disclose their carbon emissions and invest in sustainable practices are better positioned to enhance their market value and attract responsible investors. This comprehensive understanding of the interplay between carbon emission disclosure and company value provides valuable insights for policymakers, investors, and corporate leaders aiming to foster sustainable economic growth.

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