# The Impact of Greenwashing: Risks and Implications for Corporate Performance and Stakeholder Trust

Woon Leong, Lin[1*]; Siong Choy, Chong[1]; Chuen Khee, Pek[1]; Jing Yi, Yong[1], Kelvin Lee Yong Ming[1]; Nelvin Leow XeChung[1].

**Corresponding Author Email: woonleong.lin@taylors.edu.my

[1]School of Management and Marketing, Faculty Business and Law, Taylor's University, Malaysia.

**Abstract.** This conceptual paper investigates the impact of greenwashing on firm risk, corporate reputation, and financial performance, particularly in industries with significant environmental implications. Using Legitimacy Theory, Stakeholder Theory, and Signalling Theory, it explores why firms engage in greenwashing and the risks associated with deceptive environmental practices. Greenwashing may offer short-term benefits, such as enhanced brand image or market share, but it also leads to long-term consequences, including legal liabilities, reputational damage, and financial instability. The paper emphasizes the importance of corporate transparency and genuine sustainability practices in mitigating these risks. By aligning corporate actions with stakeholder expectations and promoting accountability, firms can avoid the pitfalls of greenwashing and build lasting trust with consumers, investors, and regulators. This theoretical framework offers insights into how companies can foster ethical behaviour and sustainable practices for long-term success.

**Keywords:** Greenwashing, Firm Risk, Corporate Reputation, Stakeholder Trust, Sustainability Practices

## 1 Introduction

### 1.1 Background

The global business landscape is undergoing a profound shift towards sustainability, spurred by increasing pressure from stakeholders, regulatory bodies, and the wider public. Companies are no longer evaluated solely based on their financial performance but also on their environmental and social impact. As businesses strive to balance profitability with sustainable practices, the concept of "greenwashing" has emerged as a critical issue. Greenwashing refers to the deceptive practice where companies exaggerate or falsely represent their environmental efforts, misleading stakeholders into believing that their products, services, or operations are more environmentally friendly than they truly are (Delmas & Burbano, 2011). This paper aims to explore the effects of greenwashing on firm risk, corporate reputation, and financial performance, with a specific focus on the automotive industry.


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The automotive industry serves as an ideal context for this study due to its significant environmental footprint and the increasing demand for sustainability within the sector. Automakers have faced growing scrutiny from both regulators and consumers to reduce carbon emissions and adopt cleaner technologies (Cano-Olivos et al., 2022). However, despite the pressure to become more sustainable, some companies engage in greenwashing to enhance their image without fully committing to genuine environmental practices. A notable example is the 2015 "Diesel-gate" scandal involving Volkswagen, where the company was found to have manipulated emission tests to falsely present its diesel vehicles as environmentally friendly. The scandal not only resulted in significant financial penalties for Volkswagen but also severely damaged its reputation and led to a loss of consumer trust (Aranguren Gómez et al., 2023). This incident underscores the potential repercussions of greenwashing, particularly in industries with high environmental stakes.

The term "greenwashing" was coined by environmentalist Jay Westerveld in the 1980s to describe misleading environmental claims made by corporations. Since then, greenwashing has become a widespread phenomenon across various industries, particularly those facing significant environmental scrutiny, such as energy, fashion, and automotive sectors (Lyon & Montgomery, 2015). As consumers become more environmentally conscious, companies are incentivized to project a greener image to attract eco-conscious customers and investors. However, when these claims are not substantiated by real actions, they constitute greenwashing, which can have severe consequences for the company involved (Testa et al., 2015).

Greenwashing manifests in several ways, including the use of vague or misleading labels, selective disclosure of positive environmental impacts while omitting harmful practices, and promoting minor environmental initiatives to divert attention from the company's overall negative environmental footprint (Marquis et al., 2016). For instance, an automaker may advertise the launch of an electric vehicle (EV) while continuing to produce large numbers of gas-guzzling SUVs, thereby overstating its commitment to sustainability. Such deceptive practices can create a false perception of environmental responsibility, leading stakeholders to make decisions based on incomplete or inaccurate information.

The rise of greenwashing is partly fuelled by the growing importance of sustainability in corporate governance. Stakeholders, including customers, investors, regulators, and non-governmental organizations, are increasingly demanding transparency and accountability regarding environmental performance. Companies are expected to adhere to environmental, social, and governance (ESG) standards, which are becoming key metrics in evaluating corporate success (Seele & Gatti, 2015). However, the lack of standardized regulations for verifying environmental claims allows companies to exploit greenwashing tactics with relative impunity (Parguel et al., 2011).

One of the key consequences of greenwashing is its potential to increase firm risk. Firm risk refers to the uncertainty and volatility a company faces in its financial performance, market standing, and overall operations. Greenwashing can exacerbate these risks in several ways. First, companies that engage in greenwashing may face regulatory penalties if their false claims are exposed. Governments and regulatory bodies around the world are increasingly implementing stricter environmental regulations, and companies caught greenwashing may face fines, lawsuits, and other legal repercussions (Lyon & Maxwell, 2011). For example, following the Volkswagen scandal, the company faced billions of dollars in fines and settlements, significantly impacting its financial stability (Lee & Raschke, 2023).

Second, greenwashing can lead to reputational damage, which in turn increases firm risk. A company's reputation is a valuable intangible asset that influences its relationships with stakeholders, including customers, investors, employees, and partners. When greenwashing is exposed, it can lead to a loss of trust and credibility, damaging the company's brand and making it more vulnerable to market fluctuations and negative publicity (Leonidou et al., 2013). As consumers become more informed and socially conscious, they are less likely to support companies that engage in deceptive practices. This can lead to a decline in sales, customer loyalty, and market share, further increasing the company's risk profile (Dixon, 2020).

Moreover, greenwashing can impact investor confidence. Investors are increasingly incorporating ESG factors into their investment decisions, and companies that fail to meet sustainability standards may find it more difficult to attract investment (Du, 2015). If a company's greenwashing practices are uncovered, it may lead to divestment and a decline in stock price, increasing the company's financial volatility. In extreme cases, greenwashing can even lead to bankruptcy if the company is unable to recover from the financial and reputational damage (Vangeli et al., 2023).

Corporate reputation plays a central role in the relationship between greenwashing and firm risk. A company's reputation is built on the perceptions and trust of its stakeholders, and once damaged, it can be difficult to repair. In the context of greenwashing, a company's reputation is at risk because stakeholders expect transparency and honesty regarding environmental practices (Black et al., 2000). When a company is caught greenwashing, it can lead to a significant loss of trust, not only from consumers but also from other stakeholders such as investors, employees, and regulatory bodies (Freeman et al., 2018).

For instance, in the automotive industry, consumers increasingly value eco-friendly innovations such as electric vehicles and low-emission technologies. Companies that are perceived as leaders in sustainability enjoy a competitive advantage, as they are more likely to attract environmentally conscious consumers (Liu et al., 2023). However, if these companies are exposed for greenwashing, they risk losing this advantage. The backlash can be swift and severe, as seen in the case of Volkswagen, where the company's once-strong reputation was severely damaged following the Diesel-gate scandal. Despite efforts to rebuild its image, the company continues to face scepticism from consumers and regulators alike (Aranguren Gómez et al., 2023).

In addition to the loss of consumer trust, greenwashing can negatively affect a company's relationships with investors. Investors are increasingly prioritizing sustainability when making investment decisions, and companies that engage in greenwashing are seen as risky and unethical. This can lead to divestment and a decline in stock price, further harming the company's financial performance (Vangeli et al., 2023). In the long term, companies that prioritize short-term gains through greenwashing may find themselves at a disadvantage compared to those that genuinely commit to sustainable practices (Chen et al., 2021).

The link between greenwashing and financial performance is another critical area of concern. While greenwashing may provide short-term benefits by attracting consumers and investors who prioritize sustainability, the long-term effects can be detrimental. Studies have shown that companies that engage in greenwashing tend to underperform financially compared to those that genuinely implement sustainable practices (Zott & Huy, 2007). This is because greenwashing undermines consumer trust, damages corporate reputation, and increases legal and regulatory risks, all of which negatively impact financial performance (Vangeli et al., 2023).

This paper seeks to contribute to the growing body of literature on greenwashing by exploring its impact on firm risk, corporate reputation, and financial performance in the automotive industry. By providing a comprehensive analysis of these dynamics, this paper aims to offer valuable insights for both academic researchers and industry practitioners in navigating the challenges of greenwashing in the pursuit of genuine sustainability.

## 2. Literature Review

### 2.1 Introduction

Greenwashing has become an increasingly prominent topic in both academic research and industry discourse, as corporations around the globe strive to align themselves with sustainability goals, often with varying levels of transparency and honesty. While many firms have genuinely integrated environmental, social, and governance (ESG) practices into their core operations, others engage in misleading or exaggerated claims about their environmental efforts, a practice known as greenwashing. This chapter reviews the literature on the key concepts central to this study, including greenwashing, its impacts on firm risk, corporate reputation, financial performance

### 2.2 Greenwashing: Definitions and Typologies

#### 2.2.1 Defining Greenwashing

Greenwashing is broadly defined as the practice where firms communicate misleading or false claims about their environmental practices in order to create a more favourable image with stakeholders (Delmas & Burbano, 2011). It involves overstating the environmental benefits of products, services, or overall corporate practices. The primary intent behind greenwashing is often to mislead consumers, investors, and other stakeholders into believing that a company is more environmentally responsible than it actually is (Marquis et al., 2016).

Greenwashing is commonly associated with the divergence between symbolic gestures and substantive actions. According to Seele and Gatti (2015), symbolic actions such as green logos, eco-labels, and sustainability reports are often utilized to project an image of environmental responsibility. However, these actions may not correspond with actual sustainable practices, resulting in what Bowen and Aragon-Correa (2014) refer to as a decoupling of communication from practice. Delmas and Burbano (2011) also describe greenwashing as a strategic manoeuvre employed by firms to capitalize on the growing demand for sustainability while avoiding the costs of actual environmental improvements.

### 2.2.2 Typologies of Greenwashing

Research has explored different types of greenwashing, with scholars categorizing firms into several archetypes. Delmas and Burbano (2011) offer a widely cited typology based on the alignment or misalignment between communication and environmental performance. Their framework identifies four types of firms:

- Vocal Green Firms: Companies that both communicate and practice genuine environmental responsibility.
- Silent Green Firms: Those that engage in environmental practices but do not communicate them.
- Silent Brown Firms: Companies that neither engage in environmental practices nor make claims about sustainability.
- Greenwashing Firms: Entities that make false or exaggerated claims about their environmental performance.

Another classification, offered by Seele and Gatti (2017), divides firms into greenwashing, potential greenwashing, false greenwashing, and no greenwashing categories, based on the extent of their misleading claims. The typologies are useful in understanding the varying degrees to which firms may engage in deceptive environmental practices.

## 2.3 The Rise of Greenwashing

### 2.3.1 Drivers of Greenwashing

Greenwashing is largely driven by external pressures from stakeholders, including consumers, investors, and regulatory bodies, who demand higher standards of corporate environmental responsibility (Lyon & Montgomery, 2015). As environmental awareness grows, so too does the expectation that firms contribute positively to environmental sustainability. Firms often perceive financial and reputational benefits from projecting an image of environmental stewardship. According to Lyon and Maxwell (2011), firms may feel compelled to engage in greenwashing when they perceive that the cost of implementing genuine sustainability measures outweighs the potential short-term gains of simply appearing environmentally responsible.

The competitive advantage derived from appearing green can also motivate firms to engage in greenwashing. Companies in sectors with significant environmental impacts, such as the automotive industry, are under particularly intense pressure to adopt sustainable practices. Delmas and Montes-Sancho (2010) note that firms in environmentally sensitive industries may resort to greenwashing in order to maintain legitimacy and competitive standing.

### 2.3.2 Greenwashing in the Automotive Industry

The automotive industry is particularly vulnerable to greenwashing due to its large carbon footprint and the increasing demand for more environmentally friendly vehicles. Companies such as Volkswagen, with the infamous "Diesel-gate" scandal in 2015, serve as a cautionary tale for the consequences of greenwashing. Volkswagen falsely claimed that its diesel vehicles met environmental emission standards, when in reality, the company had rigged its engines to pass emission tests while emitting far more pollutants than allowed (Aranguren Gómez et al., 2023). This scandal highlighted the potential legal, financial, and reputational consequences of greenwashing.

In addition to such overt examples, greenwashing is also prevalent in more subtle forms in the industry. Many automakers promote the development of electric vehicles (EVs) as part of their sustainability initiatives, while continuing to produce traditional vehicles with high emissions. This selective emphasis on green products while downplaying harmful practices exemplifies the broader pattern of greenwashing observed across the industry (Cano-Olivos et al., 2022).

## 2.4 Greenwashing and Firm Risk

### 2.4.1 Conceptualizing Firm Risk

Firm risk refers to the uncertainty and volatility a company faces in its financial performance, operational activities, and market standing. It is often measured through various indicators such as market volatility, idiosyncratic risk, and systematic risk (Bettis & Thomas, 1990). The relationship between greenwashing and firm risk is of significant interest because deceptive environmental practices can expose firms to multiple risks, including legal, reputational, and financial risks.

Legal risks arise when firms face regulatory penalties for misleading environmental claims. For example, Volkswagen incurred billions of dollars in fines and settlements as a result of the Diesel-gate scandal (Lee & Raschke, 2023). Firms may also face lawsuits from consumers and investors who feel misled by greenwashing. Additionally, greenwashing can lead to reputational risks, which in turn exacerbate financial risks.

### 2.4.2 Greenwashing and Legal Risk

As regulatory frameworks surrounding environmental claims become stricter, firms engaged in greenwashing face higher legal risks. Governments and regulatory bodies, particularly in Europe and North America, are increasingly holding companies accountable for their environmental impact (Lyon & Montgomery, 2015). Companies that are found guilty of greenwashing may face fines, legal sanctions, and restrictions on their ability to operate in certain markets. In the case of Volkswagen, the company not only faced substantial financial penalties but also encountered significant regulatory hurdles that affected its global operations (Aranguren Gómez et al., 2023).

Greenwashing can also expose firms to class action lawsuits from consumers who feel deceived by false environmental claims. For instance, companies that falsely advertise their products as eco-friendly may face litigation from consumer protection groups, resulting in costly legal battles and damage to their reputation (Du, 2015).

### 2.4.3 Greenwashing and Reputational Risk

Corporate reputation is a crucial intangible asset that influences stakeholder perceptions and trust. Greenwashing can lead to severe reputational damage when a company's deceptive practices are exposed. The erosion of trust among stakeholders, including consumers, investors, and employees, can have far-reaching consequences for a firm's long-term sustainability (Freeman et al., 2018).

When companies are caught greenwashing, the backlash can be swift and severe, as seen in the case of Volkswagen. The Diesel-gate scandal not only led to financial penalties but also resulted in a significant loss of consumer trust and investor confidence (Vangeli et al., 2023). Consumers are increasingly sceptical of corporate environmental claims, and once a company is labelled as a greenwasher, it can take years to rebuild its reputation (Seele & Gatti, 2017). Furthermore, greenwashing can negatively impact employee morale and loyalty, as employees may feel disillusioned working for a company that does not live up to its stated values (Black et al., 2000).

### 2.4.4 Greenwashing and Financial Risk

Greenwashing can also have a direct impact on a company's financial performance. Studies have shown that companies engaged in greenwashing tend to underperform financially compared to those that genuinely adopt sustainable practices (Lee & Raschke, 2023). The financial risks associated with greenwashing stem from both the direct costs of legal penalties and the indirect costs of reputational damage, which can lead to a decline in sales, customer loyalty, and investor confidence.

## 2.5 Greenwashing and Corporate Reputation

### 2.5.1 The Importance of Corporate Reputation

Corporate reputation refers to the collective perceptions of a company's behaviour and values, as held by its stakeholders, including customers, investors, employees, and regulatory bodies. A positive reputation is an essential asset for companies, as it enhances customer loyalty, attracts talent, and builds investor confidence. Conversely, a damaged reputation can lead to a loss of market share, higher capital costs, and difficulty attracting and retaining employees (Black et al., 2000).

In the context of greenwashing, corporate reputation is particularly vulnerable. When a company is caught making false or exaggerated environmental claims, its reputation can be severely damaged, leading to long-term consequences for its business performance. According to Fombrun and Van Riel (2004), corporate reputation is built on trust, and once that trust is broken, it is difficult to restore.

### 2.5.2 Greenwashing's Impact on Corporate Reputation

Several studies have examined the impact of greenwashing on corporate reputation. Delmas and Burbano (2011) argue that greenwashing can have a detrimental effect on a company's reputation, as it undermines stakeholder trust and credibility. This is particularly true for companies in industries where environmental sustainability is a key driver of consumer and investor behaviour, such as the automotive industry.

Greenwashing can also lead to negative media coverage, which further damages a company's reputation. For example, the Volkswagen Diesel-gate scandal was widely covered in the media, and the negative publicity significantly harmed the company's brand image (Vangeli et al., 2023). Negative media attention not only affects consumer perceptions but also influences investor behaviour, as investors may view companies with a tarnished reputation as riskier investments (Matejek & Gössling, 2014).

### 2.5.3 Rebuilding Reputation Post-Greenwashing

Rebuilding a damaged reputation after greenwashing is a challenging process that requires a significant investment of time and resources. Companies must demonstrate genuine commitment to sustainability through transparent communication and substantive actions (Parguel et al., 2011). Some firms may attempt to repair their reputation by implementing corrective measures, such as adopting more rigorous environmental standards or engaging in corporate social responsibility (CSR) initiatives. However, studies suggest that stakeholders are often sceptical of post-greenwashing efforts, particularly if the company has a history of deceptive practices. According to Du (2015), rebuilding trust requires a long-term commitment to transparency and accountability. Companies must go beyond symbolic gestures and demonstrate a genuine commitment to sustainability in order to regain the trust of stakeholders.

## 2.6 Greenwashing and Financial Performance

### 2.6.1 The Financial Implications of Greenwashing

The relationship between greenwashing and financial performance has been the subject of extensive research. Several studies have found that greenwashing has a negative impact on financial performance, as it leads to a loss of consumer trust, investor confidence, and market share (Lee & Raschke, 2023). Greenwashing can also result in higher capital costs, as investors demand higher returns to compensate for the increased risks associated with the company's poor environmental practices.

In contrast, companies that adopt genuine sustainability practices tend to outperform their peers financially. According to Zott and Huy (2007), firms that are seen as environmentally responsible enjoy higher levels of customer loyalty, investor confidence, and employee satisfaction, all of which contribute to improved financial performance.

### 2.6.2 Greenwashing and Market Performance

Greenwashing can also have a negative impact on a company's market performance. Studies have shown that companies caught engaging in greenwashing tend to experience a decline in stock price, as investors react to the negative publicity and increased risk associated with the company's deceptive practices (Leonidou et al., 2013). For example, following the Volkswagen Dieselgate scandal, the company's stock price plummeted, resulting in significant financial losses for both the company and its shareholders (Aranguren Gómez et al., 2023).

Furthermore, greenwashing can lead to a decline in sales, as consumers become more sceptical of the company's environmental claims. According to Delmas and Montes-Sancho (2010), consumers are increasingly looking for transparency and authenticity in corporate environmental practices, and companies that engage in greenwashing risk losing the trust and loyalty of environmentally conscious customers.

### 2.6.3 Long-Term Financial Impact

While greenwashing may provide short-term financial gains by attracting environmentally conscious consumers and investors, the long-term financial impact is generally negative. Companies that engage in greenwashing are more likely to face legal penalties, reputational damage, and declining market performance, all of which can erode their profitability over time (Matejek & Gössling, 2014). In contrast, firms that adopt genuine sustainability practices tend to enjoy more stable and positive financial outcomes, as they build long-term trust and loyalty among stakeholders (Lee & Raschke, 2023).

## 3. Theoretical Framework

### 3.1 Introduction

Understanding the impact of greenwashing on firm risk, corporate reputation, and financial performance requires a solid theoretical foundation. Various theories, particularly in the fields of corporate governance, stakeholder management, and organizational behaviour, can help to explain why firms engage in greenwashing, how it affects their operations. This chapter presents the key theories that underpin this study: Legitimacy Theory, Stakeholder Theory, and Signalling Theory. These frameworks provide insight into the complex dynamics between greenwashing, firm performance, and stakeholder relationships.

## 3.2 Legitimacy Theory

### 3.2.1 Overview of Legitimacy Theory

Legitimacy theory posits that organizations must operate within the bounds and norms of their societal environment to survive and prosper. Organizations seek legitimacy from their stakeholders by aligning their operations and communications with socially accepted values and expectations (Suchman, 1995). According to Dowling and Pfeffer (1975), legitimacy is a generalized perception that the actions of an entity are desirable, proper, or appropriate within the system of norms, values, beliefs, and definitions shared by society. For businesses, legitimacy often revolves around demonstrating adherence to societal expectations about corporate responsibility, environmental sustainability, and ethical behaviour.

### 3.2.2 Applying Legitimacy Theory to Greenwashing

In the context of greenwashing, firms may engage in deceptive environmental practices to maintain or enhance their legitimacy in the eyes of stakeholders. As societal awareness of environmental issues grows, firms are increasingly pressured to adopt sustainable practices. When firms struggle to meet these expectations through substantive changes, they may resort to greenwashing—using symbolic actions and misleading communications to create the appearance of environmental responsibility (Laufer, 2003). By doing so, they aim to preserve their legitimacy without bearing the full cost of genuine sustainability efforts.

Legitimacy theory explains why firms might be driven to greenwash, as maintaining legitimacy is essential for survival in a competitive and environmentally conscious marketplace. Failure to align with societal expectations can lead to public disapproval, regulatory scrutiny, and diminished stakeholder support (Bitektine, 2011). Greenwashing allows firms to temporarily protect their legitimacy by creating a perception of alignment with societal values, even if their actual practices lag behind.

For example, the automotive industry faces substantial scrutiny due to its significant contribution to global carbon emissions. To maintain legitimacy, automakers may overstate their environmental initiatives through green marketing campaigns, such as promoting electric vehicles (EVs) while continuing to produce large numbers of gas-guzzling SUVs. This creates a facade of environmental responsibility, which helps firms maintain their social license to operate (Delmas & Burbano, 2011).

### 3.2.3 Legitimacy Theory and Firm Risk

While greenwashing may help a firm maintain legitimacy in the short term, it can significantly increase long-term risks. If stakeholders—particularly regulators, investors, and consumers—discover that a company has engaged in greenwashing, the firm may experience severe reputational damage, legal repercussions, and financial penalties. This was evident in the Volkswagen Dieselgate scandal, where the company's legitimacy was severely undermined when it was revealed that it had falsified emissions data (Lee & Raschke, 2023).

In this sense, legitimacy theory not only explains the motivations behind greenwashing but also highlights the potential risks that arise when firms fail to genuinely align their practices with societal values. Companies that rely on greenwashing are at risk of losing their legitimacy if stakeholders perceive a disconnect between the firm's communications and its actual environmental performance.

## 3.3 Stakeholder Theory

### 3.3.1 Overview of Stakeholder Theory

Stakeholder theory, developed by Freeman (1984), emphasizes that organizations are accountable to a wide range of stakeholders—not just shareholders—who have an interest in the firm's activities. These stakeholders include employees, customers, suppliers, investors, regulators, and the broader community. Stakeholder theory posits that businesses must consider the interests of all stakeholders in their decision-making processes to ensure long-term success and sustainability.

In contrast to traditional models of corporate governance, which focus primarily on maximizing shareholder value, stakeholder theory advocates for a broader understanding of corporate responsibility. Organizations are seen as part of a larger social fabric and are expected to balance the competing interests of different stakeholder groups while contributing to societal well-being.

### 3.3.2 Greenwashing and Stakeholder Relationships

Stakeholder theory is particularly relevant in the context of greenwashing, as the practice directly affects the trust and relationships between a firm and its stakeholders. When companies engage in greenwashing, they mislead stakeholders—particularly consumers and investors—about their environmental commitments. This can lead to a breakdown in trust, which is essential for maintaining positive stakeholder relationships.

For example, consumers are increasingly making purchasing decisions based on a company's environmental credentials. Greenwashing undermines consumer trust by creating a false narrative about a company's sustainability practices, leading to customer dissatisfaction and potential boycotts when the truth is revealed (Lyon & Montgomery, 2015). Investors, too, are placing greater emphasis on ESG criteria in their decision-making processes, and companies that fail to meet these criteria may face divestment and declining stock prices (Ioannou & Serafeim, 2012).

Stakeholder theory explains why firms that engage in greenwashing are at risk of damaging their relationships with key stakeholder groups. The loss of stakeholder trust can have significant financial and reputational consequences, as seen in cases like Diesel-gate, where Volkswagen's misrepresentation of its environmental performance led to a significant loss of consumer and investor confidence (Aranguren

Gómez et al., 2023). In addition, stakeholder pressure may lead to regulatory intervention, further increasing the firm's risk exposure.

### 3.3.3 Stakeholder Theory and Corporate Reputation

Stakeholder theory also provides a useful lens for understanding the role of corporate reputation in greenwashing. A company's reputation is a reflection of how well it meets the expectations of its stakeholders. When a firm engages in greenwashing, it risks damaging its reputation by failing to live up to its environmental claims. A damaged reputation can have long-lasting effects on a company's ability to attract and retain customers, employees, and investors.

Corporate reputation is a critical asset in today's business environment, particularly for firms operating in industries with high environmental impact, such as the automotive sector (Black et al., 2000). As stakeholders become more concerned with environmental sustainability, companies that are perceived as greenwashing are likely to experience a decline in reputational capital. This, in turn, can negatively impact their market performance and long-term viability.

Stakeholder theory emphasizes the importance of maintaining transparent and honest communication with stakeholders. Firms that engage in greenwashing violate this principle, as they present a misleading picture of their environmental performance. Over time, this erodes trust and damages the firm's reputation, making it difficult to recover from greenwashing scandals.

## 3.4 Signalling Theory

### 3.4.1 Overview of Signalling Theory

signalling theory, first developed by Spence (1973) in the context of labour markets, has been widely applied to corporate behaviour, particularly in the area of communication and information asymmetry. The theory posits that firms send signals to the market through their actions and communications to convey information about their quality or intentions. These signals are used by external parties—such as consumers, investors, and regulators—to make decisions about the firm.

Signalling theory is particularly relevant when there is an information asymmetry between firms and their stakeholders, meaning that stakeholders have limited information about the firm's internal operations and must rely on external signals to assess the firm's environmental performance (Connelly et al., 2011). In the context of greenwashing, firms send signals about their environmental commitment through sustainability reports, marketing campaigns, eco-labels, and other forms of communication.

### 3.4.2 Greenwashing as a False Signal

Greenwashing can be viewed through the lens of signalling theory as the sending of false or misleading signals about a firm's environmental practices. Firms that engage in greenwashing attempt to signal to stakeholders that they are environmentally responsible, even when their actual practices do not support this claim. These false signals can be highly effective in the short term, as stakeholders may be unable to verify the firm's true environmental performance due to information asymmetry (Delmas & Burbano, 2011).

However, signalling theory also helps explain the risks associated with greenwashing. When stakeholders discover that a firm has sent false signals, the firm's credibility is undermined, leading to a loss of trust and reputational damage (Connelly et al., 2011). In markets where transparency and sustainability are valued, firms that are caught greenwashing may find it difficult to recover their reputational standing.

Moreover, greenwashing can lead to negative financial consequences if stakeholders—such as investors—perceive the firm's false signals as a sign of broader management issues. For example, when Volkswagen's greenwashing practices were exposed during the Dieselgate scandal, investors reacted by selling off shares, leading to a significant decline in the company's stock price (Marquis et al., 2016).

### 3.4.3 Signalling Theory and Firm Performance

Signalling theory offers insight into how greenwashing affects firm performance. Firms that successfully send positive signals about their environmental practices can enhance their market position, attract environmentally conscious consumers, and gain access to ESG-focused investment (Ioannou & Serafeim, 2012). However, firms that are caught sending false signals through greenwashing may experience the opposite effect, as stakeholders withdraw their support and the firm's financial performance suffers.

Theoretical frameworks such as Legitimacy Theory, Stakeholder Theory, and Signalling Theory provide valuable insights into the complex dynamics between greenwashing, firm risk, and corporate reputation. Legitimacy Theory explains why firms engage in greenwashing to maintain their social license to operate, while Stakeholder Theory highlights the importance of maintaining trust and transparent communication with key stakeholders. Signaling Theory further illuminates how firms use greenwashing as a means of sending false signals to the market, and the risks associated with being caught.

## 4: Discussion and Implications

### 4.1 Discussion

The purpose of this study is to explore how greenwashing impacts firm risk, corporate reputation, and financial performance, with a focus on the automotive industry. Theoretical frameworks such as Legitimacy Theory, Stakeholder Theory, and Signalling Theory provide critical insight into the motivations behind greenwashing and the consequences for firms. In this chapter, we discuss the findings in relation to these frameworks and consider the broader implications for corporate governance, marketing strategies, and regulatory practices.

### 4.1.1 Greenwashing and Firm Risk

As highlighted in the literature, greenwashing increases a firm's exposure to various risks, including legal, reputational, and financial risks. From a legal standpoint, firms caught engaging in greenwashing may face fines, lawsuits, and other regulatory penalties. The Volkswagen Diesel-gate scandal is an illustrative example of the catastrophic legal and financial consequences of greenwashing. Following the exposure of its greenwashing practices, Volkswagen faced billions of dollars in fines, lawsuits, and settlements globally (Aranguren Gómez et al., 2023). This case supports Legitimacy Theory by demonstrating that companies that fail to meet societal expectations and engage in deceptive practices can experience significant loss of legitimacy, leading to heightened legal risk.

Greenwashing also leads to reputational risks. Corporate reputation is an invaluable asset in a competitive marketplace, and once trust is broken, it can be difficult to rebuild. The automotive industry, for instance, relies heavily on consumer trust, as car buyers seek products that align with their values, particularly regarding sustainability (Lee & Raschke, 2023). As consumers become more aware of environmental issues, they are more likely to hold companies accountable for false claims. This is supported by Stakeholder Theory, which emphasizes that companies must meet the expectations of diverse stakeholders—including consumers, investors, regulators, and environmental advocacy groups—to ensure long-term success.

Moreover, greenwashing significantly impacts financial risk. Firms involved in greenwashing can experience declining stock prices, divestment from ESG-focused investors, and increased volatility in financial performance. Signaling Theory explains this dynamic by highlighting how false environmental claims can undermine investor confidence, leading to greater financial uncertainty. Investors who prioritize sustainability are likely to withdraw support from firms that fail to meet ESG criteria, thus increasing capital costs and lowering market valuations (Connelly et al., 2011).

## 4.2 Implications

The findings of this study carry important theoretical, practical, and policy implications for businesses, regulators, and stakeholders.

### 4.2.1 Theoretical Implications

This study contributes to the growing body of literature on corporate environmental responsibility and greenwashing by providing a comprehensive analysis of how greenwashing influences firm risk, reputation, and financial performance. The application of Legitimacy Theory, Stakeholder Theory, and Signalling Theory helps to explain the underlying motivations for greenwashing and the consequences for firms that engage in deceptive practices.

### 4.2.2 Practical Implications for Businesses

For business leaders, this study emphasizes the importance of avoiding greenwashing and prioritizing genuine sustainability efforts. While greenwashing may offer short-term benefits in terms of brand image and consumer appeal, the long-term consequences can be severe. Companies that engage in greenwashing risk losing the trust of key stakeholders, facing legal and financial penalties, and damaging their reputation in ways that are difficult to repair.

### 4.2.3 Policy and Regulatory Implications

The findings also carry significant implications for regulators and policymakers. As greenwashing becomes more widespread, there is a growing need for stricter regulations on environmental claims. Regulatory bodies should establish clear guidelines on what constitutes acceptable environmental communication and hold companies accountable for misleading claims.

Governments and international organizations could implement policies that require firms to provide verifiable data on their environmental practices. For example, mandating third-party audits for environmental claims could help ensure that firms are not engaging in greenwashing. Furthermore, regulators should consider imposing stricter penalties on firms found guilty of greenwashing, as current penalties may not be sufficient to deter the practice. The Diesel-gate scandal, for instance, led to significant fines for Volkswagen, but more stringent, industry-wide regulations could prevent future occurrences (Aranguren Gómez et al., 2023).

In addition, the promotion of ESG reporting standards can encourage firms to adopt more transparent and consistent reporting practices. By standardizing how companies report their environmental, social, and governance metrics, policymakers can reduce the information asymmetry that allows greenwashing to flourish. Investors and consumers alike would benefit from clearer, more reliable data when evaluating a firm's sustainability efforts.

## 5. Conclusion

This paper has explored the critical issue of greenwashing and its impact on firm risk, corporate reputation, and financial performance, with particular emphasis on the automotive industry. By employing the theoretical frameworks of Legitimacy Theory, Stakeholder Theory, and Signaling Theory, the study provides a comprehensive understanding of why firms engage in greenwashing, the risks involved.

Greenwashing presents significant risks for firms, especially in industries where environmental sustainability is a key concern, such as automotive manufacturing. While greenwashing may allow firms to maintain short-term legitimacy, the long-term consequences—including reputational damage, financial penalties, and loss of stakeholder trust—are far more detrimental. Firms caught engaging in greenwashing often experience significant declines in stock value and market performance, as seen in the Volkswagen Dieselgate case (Lee & Raschke, 2023).

The study's findings carry important implications for business leaders, regulators, and policymakers. Businesses must prioritize transparency and authenticity in their environmental communications, while policymakers should implement stricter regulations and standards to prevent greenwashing. Ultimately, as public awareness of environmental issues continues to grow, the demand for genuine corporate responsibility will only intensify. Companies that invest in real sustainability efforts—rather than relying on greenwashing—are likely to enjoy greater long-term success.

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