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Assessing the influence of ESG washing on bank reputational exposure: A cross-country analysis

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Abstract

The study investigates the effects of ESG washing on banks' reputational exposure. We define ESG washing as a disparity between a bank's environmental and social disclosure level and the practical implementation of the relative measures. The analysis involves an international sample of 120 banks operating across 35 countries from 2014 to 2020. The results evidence a different effect based on the pillar considered: the higher the inconsistency on environmental issues, the higher a bank's reputational exposure. Conversely, higher levels of disclosure compared to performance on social issues appear to reduce reputational exposure. In addition, citizen movements and the country's legal system play a significant role in amplifying or mitigating a bank's reputational exposure. Our findings offer insight into the phenomenon of ESG washing in the banking industry, supporting the need for more verified information across countries and all economic sectors.

KEYWORDS
bank, ESG, reputational risk, substantive vs. symbolic, washing behaviour

1 | INTRODUCTION

In recent years, environmental, social and governance factors (hereafter ESG) have received increasing attention within the financial industry (Erhemjamts et al., 2024; Shakil et al., 2019). Additionally, regulatory bodies stress the significance of aligning banking business strategies with ESG factors to mitigate the effects of climate-related risks over the long term (European Central Bank, 2020, 2021). ESG factors impact financial institutions' reputation and performance since they shape stakeholders' expectations and behaviour (Choi et al., 2023). However, the pressure exerted by stakeholders and regulatory bodies, along with banks' imperative to enhance their market positioning, could lead to the implementation of more figurative rather than substantive ESG initiatives (Boiral et al., 2023;

Free et al., 2024; Huang et al., 2024; Sun et al., 2023). The increasing demand for sustainability-related information and net zero commitments has created conditions ripe for ESG washing behaviours (Montgomery et al., 2023).

Anecdotal evidence indicates a rising trend of washing behaviour within the financial sector. The banking and financial services industry ranks just after oil and gas in terms of the number of greenwashing incidents (RepRisk, 2022). Shockingly, global instances of greenwashing by financial entities witnessed a 70% spike in 2023 alone (Reuters, 2023a). For example, the U.S. Securities and Exchange Commission (SEC) recently penalised major entities such as Deutsche Bank, Goldman Sachs Asset Management and BNY Mellon for deceitful greenwashing tactics and ESG misrepresentations (Reuters, 2023b). Europe and the United States have increased

their regulatory and punitive actions. The SEC is considering a series of proposed disclosure rules to provide more consistent information for investors and address the risk of greenwashing by exaggerating or misrepresenting ESG claims (SEC, 2021; 2022). Moreover, the European Union drafted plans and penalties to require companies to back up environmental claims with evidence to fight misleading conduct (EBA, 2021, 2023; ESAs, 2022; European Commission, 2023). Consequently, the consistency of ESG practices and the subjective evaluation of ESG strategies have also raised doubts among financial actors who argue that ESG performance is difficult to aggregate and accurately compare (PitchBook, 2023).

ESG washing occurs when companies intend to gain social legitimacy by claiming to be committed to ESG issues but have no or very little proof of that (Free et al., 2024; Huang et al., 2024; Sun et al., 2023) or, in other words, when there is inconsistency between ESG disclosure and performance. ESG washing enables companies to garner strategic and reputational benefits similar to those generated by genuinely committed ESG efforts. This phenomenon should be identified through the general CSR decoupling approach (Delmas & Burbano, 2011), which supports the existence of a disparity between a bank's sustainability disclosure level and its practical implementation of sustainability measures. In other words, the discrepancy between 'figurative' and 'tangible' actions implies a decoupling behaviour.

Academics and practitioners have extensively examined ESG disclosure and compliance in the banking sector (e.g. Forcadell & Aracil, 2017; Sha'ban et al., 2022). Studies evidence that ESG has a positive effect on banks' efficiency, stability and stock market performance (e.g. Ali et al., 2023; Miralles-Quirós et al., 2019). Only a limited number of recent studies, however, have delved into the flipside of the coin—that of ESG washing behaviour, not only in banking but across the entire financial sector (Bowers et al., 2020; Giannetti et al., 2023; Gigante et al., 2023; Khalil and O'sullivan, 2017; Huang et al., 2024; Venturelli et al., 2024). All these studies suggest that post-Paris Agreement, banks have striven to portray themselves as ESG-conscious due to heightened pressure to disclose environmental and social strategies and decarbonisation plans. However, not all their efforts yield tangible results regarding actual environmental and social performance, sometimes leading to washing behaviour. The absence of standardisation, transparency and enforcement in ESG disclosures allows for flexible reporting that overstates ESG performance (Basu et al., 2022; Sun et al., 2023).

Insufficient attention has been given to the consequences of washing, both in terms of economics and financial performance (e.g. ROA or stock return) and corporate reputation, with the latter receiving less scrutiny (Birindelli et al., 2024; Santos et al., 2023a; Talpur et al., 2023). Hence, further research is warranted to investigate the reputational implications of washing behaviour for banks. A positive reputation is a valuable asset for the banking sector, enabling the bank to signal high-quality governance and services to the market, achieve sustained profitability and maintain superior financial performance (Adeabah et al., 2023; Fiordelisi et al., 2013). Banks are notably susceptible to reputation risk due to the inherent nature of their business; primarily, dealing with other people's money entails significant external costs in the event of misconduct (Walter, 2016). Reputational risk implies that banks, like any other entities, are susceptible to risks that may compromise the trust of investors and general stakeholder groups. Policymakers have stressed the importance of banks being aware of the influence of misleading ESG practices on reputational risk and associated operational costs (BCBS, 2021).

Considering the limited research on the topic, testing the effects of ESG washing on a bank's reputational risk is an interesting issue for academics and market participants. Our study, therefore, investigates the following research question: *Does ESG washing affect a bank's reputational risk?* We focus solely on environmental and social aspects to detect washing behaviour since corporate governance is the enabling/supporting/facilitating mechanism. As an internal characteristic, governance influences ESG disclosure quality and performance (D'Amato et al., 2023; Rossi et al., 2021; Venturelli et al., 2024; Zahid et al., 2023). Furthermore, regulatory and supervisory authorities have established rules and guidelines on internal governance for over a decade, making in exceedingly challenging to make misleading claims about governance aspects. As a result, we do not consider governance as a domain for washing; instead, it is regarded as a specific internal characteristic of banks that can impact the quality of ESG disclosure, implementation strategies and, consequently, ESG performance. This perspective aligns with the literature's view that governance is the primary determinant of a bank's washing behaviour (e.g. Birindelli et al., 2018; Yang et al., 2020).

The analysis involves an international sample of 120 banks operating across 35 countries from 2014 to 2020. Our study's challenge is to identify ESG washing practices by combining and integrating different data sources at an international level. Following Yu et al. (2020) and Birindelli et al. (2024), we create an ESG washing score using data provided by Bloomberg and Refinitiv Eikon. To identify bank reputational risk, we adopt the RepRisk index. RepRisk, a data provider specialising in ESG and business conduct risk, systematically tracks significant ESG risks and instances of non-compliance with international standards, which could potentially affect a company's reputation, compliance status and financial performance. We also control for governance characteristics and bank performance indicators that might affect the bank's reputational risks, as obtained from BankFocus and the World Bank database.

Our results show that ESG washing increases a bank's reputational exposure, but its effects vary depending on the specific pillar under consideration. The disclosure of increased environmental claims not backed by performance amplifies reputational risks. In contrast, considerable symbolic disclosure regarding social issues reduces reputational exposure. These findings highlight the market's sensitivity toward green claims compared to social ones. As regards bank characteristics, institutions with higher capital adequacy, better financial performance and more independent directors are less exposed to reputational risks.

Moreover, institutional conditions amplify or mitigate the impact of green and social washing on banks' reputational exposure. In particular, in countries with high citizen scrutiny, as indicated by the

presence of movements like Fridays For Future, environmental and social washing leads to an increase in reputational risk. Conversely, in common law countries, washer banks are less exposed to reputational risk. Finally, to address potential endogeneity issues, we employ corruption and country-level CO_2 emissions per capita as instrumental variables for our estimations and our results remain robust and consistent.

This research makes several contributions to the existing literature. First, our study demonstrates that banks may be inclined to practice ESG washing due to substantial pressure to meet stakeholder expectations regarding environmental and social initiatives, increasing symbolic rather than substantive actions on environmental and social issues. Where literature on ESG washing in the banking industry has been published (e.g. Huang et al., 2024; Khan et al., 2021; Venturelli et al., 2024), our study expands the field by exploring the impacts of washing activities. Second, to our knowledge, this is the first study to examine the relationship between bank ESG washing and banks' reputational risk. We test this relationship with multiple RepRisk indices to measure banking reputation risk, and we consistently operationalise ESG washing with Bloomberg and Refinitiv Eikon data. This approach addresses a significant challenge within the relevant literature (Bernini et al., 2023; Bernini & La Rosa, 2024; Liu et al., 2023), which revolved around the difficulties and uncertainties associated with designing and implementing an effective measurement instrument for washing activity. Third, our results show the contribution of different ESG dimensions to reputational risk, expanding the limited literature about the effects of washing behaviour (e.g. Chen et al., 2014; Talpur et al., 2023), and the differentiated consequences of environmental and social measures (Chouaibi et al., 2022; Miralles-Quirós et al., 2019). We also enhance the limited understanding of non-financial reputational risk factors in the banking sector (Adeabah et al., 2023). Fourth, our findings expand on the literature by emphasising the moderating role of external stakeholder scrutiny on the connection between washing behaviour and companies' economic performance (García-Sánchez et al., 2021; Li et al., 2023). We also introduce the Fridays for Future movement as a new external stakeholder group with a significant role in the public debate. Finally, as a practical and policy contribution, our results support the intervention highlighted by the European Commission (2023) and SEC (2022) and the need for more precise and verified information about green and social claims in all economic sectors. As reliability increases and the investment community gains access to improved tools for verifying reporting processes, the prevalence of ESG washing is expected to decrease. Greater transparency and standardisation of green and social claims performance measurements would decrease the disconnect we highlight in this research.

The paper is organised as follows: Section 2 introduces the background context of the study by exploring reform and policy issues that affect the level of ESG disclosure in the banking sector and recent regulatory developments to tackle washing behaviour. Sections 3 and 4 present the theoretical and empirical literature supporting our hypotheses, where we propose a multifaceted

theoretical perspective—integrating legitimacy theory, stakeholder theory and signalling theory—to boost a broader visualisation of the consequences of ESG washing. Section 5 delineates the empirical research design, including the description of the data strategy and econometric approach, and an explanation of variables. Our results and additional analyses are discussed in Section 6, where we specify how endogeneity concerns are addressed, and discuss alternative green and social washing measures and the moderating role of Fridays for Future and a country's legal system. Lastly, Section 7 offers a concluding remark, identifying the theoretical and managerial implications of the study and potential directions for future research.

2 | ESG POLICY REFORMS

Finance and the financial sector are increasingly considered strategic in attaining environmental and social goals. This recognition goes beyond their role as sellers of sustainable investment products, emphasising their responsibility as active contributors to the transition toward sustainable economic development. It is also clear that sustainability and social responsibility are becoming increasingly important for all stakeholder groups in the financial system (Gatti et al., 2021; Testa et al., 2018). For instance, companies that are not ethical from a sustainability point of view may encounter increasing difficulties and high costs in accessing finance, while companies with positive impacts may benefit from financing with better conditions (Becchetti et al., 2023). From the investor's perspective, there has been a significant increase in global assets allocated to sustainable and responsible investment strategies over the last decade. This trend is expected to persist as sustainable investing fully integrates into asset management (European Commission, 2020).

Even if the definition of a firm's focus on sustainability is unclear, there is consensus that important contributors to sustainability performance fall under three categories: ESG. ESG metrics offer a broader perspective on the sustainable commitment of a subject. Among others, important environmental aspects include greenhouse gas emissions, carbon footprint and pollution; social factors include health and safety, workers' rights and gender dynamics; governance characteristics include CEO remuneration, board features, business ethics and corruption. ESG performance refers to the efforts taken by a company to reduce its impact on these three main non-financial pillars. Consequently, banks and financial institutions must complement financial data with ESG metrics (Choi et al., 2023).

Various international agreements that foster ESG recognition and disclosure can be identified. In 2015, the 2030 Agenda for Sustainable Development, endorsed by 193 countries, recognised 17 sustainable development goals to be achieved by 2030. In the same year, the Paris Agreement was signed by 195 members of the United Nations Framework Convention on Climate Change, aiming to strengthen the global response to climate change. These international interventions underscore the critical role of the financial sector in environmental degradation and emphasise the pivotal role that

banks play in allocating resources to support a sustainable economy (Ali et al., 2023).

In response to these needs, various agencies and governments have started the development and adoption of standards for ESG disclosure (Boiral et al., 2023). The European Union has been the most ambitious regulatory authority on sustainable finance and non-financial disclosure requirements. The year 2014 saw the introduction of the Non-Financial Reporting Directive (NFRD 2014/95), which mandated the disclosure of non-financial information, transforming it from a voluntary to a mandatory practice. It also heralded the widespread use of ESG metrics for banks to demonstrate their contribution to solving environmental and social problems to stakeholders (La Torre et al., 2020). In 2018, the European Commission developed an extensive policy framework concerning sustainable finance. This encompassed an action plan directed toward funding sustainable growth. In 2021, it culminated in the formulation of a renewed sustainable finance strategy as part of the European Green Deal initiative. Other legislative initiatives in the EU have increased financial market participants' need for information on entities' sustainability characteristics, imposing disclosure requirements for financial and non-financial institutions. The most prominent examples are the Sustainable Finance Disclosure Regulation (SFDR-EU/2019/2088), the EU Taxonomy Regulation (EU/2020/852), the Corporate Sustainability Reporting Directive (EU/2022/2464), the Revised MiFID II (EU/2021/1253) and the amendment of Insurance Distribution Directive (EU/2021/1257) (see Bruno & Lagasio, 2021; Bernini & La Rosa, 2024 for a detailed overview of each intervention).

All these interventions aimed to enhance transparency in institutions' non-financial reports, facilitating the shift toward a sustainable economy (Ali et al., 2023). These improvements were designed to ensure that better and more complete information was available for all stakeholders with more transparency. However, the pressure to signal ESG efforts and focus has increased the risk of misreporting ESG performance to improve perceived attainment (Sun et al., 2023; Venturelli et al., 2024).

The regulatory environment is crucial in preventing ESG washing (Delmas & Burbano, 2011). Recital 11 of the Taxonomy Regulation defines greenwashing as "the practice of gaining an unfair competitive advantage by marketing a financial product as environmentally friendly, when in fact basic environmental standards have not been met." The MiFID II delegated act (Recital 7) defined washing as "the practice of gaining an unfair competitive advantage by recommending a financial instrument as environmentally friendly or sustainable, when in fact that financial instrument does not meet basic environmental or other sustainability-related standards." In its Sustainable Finance Strategy and SFDR Q&A, the European Commission extends the definition of greenwashing beyond misleading green claims. It includes creating false impressions and providing misleading information about a financial product's ESG sustainability performance.

The regulatory pressure around ESG washing varies significantly by region: while the European Union has the most advanced regulatory framework, the level of interventions in other countries is mixed. In 2021, the U.S. Securities and Exchange Commission (SEC) took significant steps to address ESG issues by launching the Climate and ESG Enforcement Task Force. This task force plays a pivotal role in proactively identifying and addressing misconduct related to ESG within the financial sector. Across the Asia Pacific region, 13 countries have developed taxonomies for sustainable finance, covering a spectrum from disclosure standards to tackling greenwashing risks. Singapore introduced its pioneering Green Labelling Scheme in 1992, while Indian regulators released a circular outlining criteria for green debt securities to mitigate the risk of greenwashing in February 2023 (Morningstar, 2023).

3 | THEORETICAL LITERATURE REVIEW

Viewing companies through an ESG lens is generally beneficial, except in the case of ESG washing. ESG washing refers to companies that exaggerate their ESG disclosure without matching ESG performance (Free et al., 2024; Yu et al., 2020; Ruiz-Blanco et al., 2022). ESG washing emerges as an overriding strategy, allowing companies to gain similar reputational benefits as those genuinely committed to ESG efforts. The identification of this phenomenon derives from the CSR decoupling approach, also called CSR 'talk and walk' or CSR 'hypocrisy' (Delmas & Burbano, 2011; Lyon & Maxwell, 2011; Schons & Steinmeier, 2016; Tashman et al., 2019) where the underlying concept is the presence of a gap between a company's level of disclosure—in this case, ESG information—and its actual practices on sustainable issues—ESG performance. The greater the level of disclosure compared to sustainable performance or achieved thresholds, the lower the actual efforts of the corporation toward sustainability. In general, the underlying motive of this behaviour is profit maximisation rather than a genuine involvement in sustainability issues or, in other words, a way to gain different advantages or resources with minimal effort (Pope & Wæraas, 2016).

The most extensively researched theme in the literature centres on identifying the underlying causes of ESG washing (Talpur et al., 2023; Venturelli et al., 2024; Zahid et al., 2023), while the consequences of ESG washing, which can be classified into internal consequences, encompassing corporate economics and financial performance (e.g. stock return, ROA and access to finance), and external consequences relating to corporate reputation (Talpur et al., 2023), remain a relatively underexplored area in the literature. These consequences involve complex underlying mechanisms, drawing from various theoretical insights that could help understand the relationship between ESG washing and reputational risk. Recognising the multifaceted nature of ESG washing (Bernini & La Rosa, 2024; Liu et al., 2023; Sun et al., 2023), we integrate legitimacy theory, stakeholder and institutional theories, and information asymmetry theory into the same research framework to investigate the impact of ESG washing on banks' reputational exposure.

Legitimacy theory posits the presence of a mutual agreement between the company and its stakeholders, where stakeholders'

legitimation enables companies to access resources, funding and competitive advantages more readily. ESG washing, therefore, is a form of seeking legitimation among stakeholders based on an inconsistency between ESG reporting and actual performance. The importance of pressure exerted by social systems links legitimacy theory with stakeholder theory. The latter states that ESG washing is an effective strategy for managing stakeholders and institutional pressures (e.g. Delmas & Burbano, 2011; Testa et al., 2018). Stakeholder pressure emanates from various sources, including governments, regulatory bodies, customers and investors. Companies that consider the objectives of a diverse range of stakeholders tend to achieve superior performance. These views explain why companies adopt ESG washing and the potential effects of washing behaviour. Since legitimacy pressure and conformity to social norms allow greater access to resources, government contracts and new relationships with business partners, the direct benefit of washing behaviour is an improvement in the company's economic and financial performance (Li et al., 2023; Schons & Steinmeier, 2016). However, this relationship between ESG washing and performance is inconsistent across all studies.

Companies may lose legitimacy and credibility among stakeholders when they use more symbolic than substantive action. Some studies show adverse effects of ESG washing, including a negative impact on economic performance, increased capital costs, lower stock returns (Du, 2015; García-Sánchez et al., 2021; Price & Sun, 2017) and reduced access to financial resources (García-Sánchez et al., 2021; Gatti et al., 2021). For example, Gatti et al. (2021) point out that small investors tend to invest less in companies involved in manipulative practices. Other works have shown a non-significant relationship: Testa et al. (2018) find a non-significant relationship between greenwashing companies and market value and operating performance, while a significant relationship exists for brownwashing companies (i.e. companies understating their environmental performance). Differing research outcomes can be attributed to variations in context, measurement methods and sample characteristics. The impact of ESG washing can also be influenced or reversed by moderating factors, such as the institutional environment and the role of stakeholders.

For example, applying stakeholder theory, Schons and Steinmeier (2016) pinpoint that the consequences of washing depend on the types of stakeholders involved. They identify a positive correlation between financial performance and social washing if directed at low-proximity stakeholders due to increased shareholder and customer loyalty. Conversely, they observe a negative relationship when these actions are directed at high-proximity stakeholders. Low-proximity stakeholders, such as clients or neighbourhood groups, often struggle to discern when a company is simply paying lip service or engaged in serious efforts. Consequently, they tend to rely heavily on communications issued by the firm. Conversely, for high-proximity stakeholders, such as staff members, it becomes easier to distinguish cheap talk from real effort. Moreover, in a context with high monitoring by stakeholders, they are more likely to scrutinise potential washing behaviour with a negative impact on company performance (García-Sánchez et al., 2021).

Other authors, adopting signalling theory, have also suggested that the institutional environment affects stakeholders' interpretation of corporate signals and, thus, the effect of washing (Li et al., 2023; Seele & Gatti, 2017). Signalling theory suggests that firms may opt for symbolic actions over substantive ones to signal their commitment to sustainability values. Situations characterised by a high level of information asymmetry between stakeholders and the company make it challenging to identify instances of washing behaviour (Seele & Gatti, 2017). Indeed, Li et al. (2023) find that the positive effect of washing behaviour on a company's economic performance became negative in countries where regulation is well-developed and where the media report news about corporate irresponsibility. Du (2015) and García-Sánchez et al. (2021) also highlight the role of media and financial analysts in amplifying a negative market reaction to greenwashing by companies.

4 | EMPIRICAL LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Although the effect of greenwashing on reputation has been less empirically explored, most of the existing literature agrees that washing behaviour affects reputation more than any other element, nullifying all the potential benefits achieved through a real sustainability engagement. Reputational losses stem from scepticism and the erosion of trust, credibility and reliability among clients (Chen & Chang, 2013; Santos et al., 2023a) and other stakeholder groups. These losses may lead to monetary costs or damage competitive advantage (Chen et al., 2014; Santos et al., 2023b; Zhang et al., 2018). Reputational effects are generally indirectly observed by investigating customers' reactions regarding lack of trust, increased scepticism and purchasing decisions (Chen & Chang, 2013; Chen et al., 2014).

Previous empirical evidence has shown that reputation in the banking sector is a relevant issue as it can undermine investors' and clients' trust, potentially seriously affecting the activity and performance of financial institutions (European Commission, 2023). Reputation is a paramount concern within the banking sector, prompting regulatory bodies and consultants to develop and monitor guidelines for evaluating and mitigating risks linked to reputational damage. Reputation is a hard-to-assess intangible asset that diminishes uncertainty and investor risk, bolstering a bank's value and serving as the foundation for a differentiation strategy compared to its peers. Managing exposure to reputational risk is crucial for banks, as trust and reputation are key elements in the financial sector, influencing the ability to attract deposits, retain customers and maintain positive business relationships (Fiordelisi et al., 2013). Academics agree that being ESG-compliant is a strategic factor in building and maintaining a banking reputation (Dell'Atti et al., 2017). A bank's ESG-related reputation significantly influences its liquidity, particularly in areas vulnerable to climate change (Choi et al., 2023).

However, the effects of inconsistency between ESG performance and reporting on banks' reputations have received little attention.

We aim to fill the gap in the literature exploring the effect of environmental and social washing on reputation by adopting a specific index of reputational risk. Taking a multifaceted theoretical perspective—integrating legitimacy, stakeholder and signalling theory—we hypothesise a negative effect on reputation for banks that adopt an ESG washing strategy since they lose legitimacy and credibility among stakeholders. In the context of signalling theory, the benefits of ESG washing diminish in scenarios with minimal information asymmetry between banks and potential stakeholders; in such situations, detecting washing is easier and penalties are more severe (Basu et al., 2022).

Following the classification of reputational risk factors adopted by Adeabah et al. (2023), it is possible to distinguish two categories: financial and non-financial indicators. Financial factors, such as profitability, bonuses or the funding of controversial projects, are quantifiable and readily observable. On the other hand, non-financial factors are intangible and not easily measured, encompassing actions like neglecting or postponing contributions to a better future, displaying irresponsible managerial conduct, exhibiting poor leadership and management, lacking sufficient supervision and endorsing a lax interpretation of environmental integrity. Consequently, ESG washing may be regarded as a non-financial risk factor.

Furthermore, banks may develop an instrumental use of green and social claims referring to two distinct ESG pillars. Building on the empirical literature reviewed, we propose two distinct impacts of greenwashing and social washing. The prevailing view among scholars is that greenwashing is primarily linked to environmental concerns, while social issues are often identified separately, using terms like 'social washing', 'blue-washing' or 'pinkwashing' by examining specific social aspects such as working conditions (Schons & Steinmeier, 2016) or gender issues (Venturelli et al., 2024). Both negatively impact reputational risks. BCBS (2019, pp. 6) defined reputational risk as 'risk arising from negative perception on the part of customers, counterparties, shareholders, investors, debt-holders, market analysts, other relevant parties or regulators that can adversely affect a bank's ability to maintain existing, or establish new, business relationships and continued access to sources of funding'. Unethical conduct by banks changes depositors' and investors' attitudes and behaviour (Tosun, 2020; Tseng, 2019), so, in the case of banks, adopting washing practices may generate reputational risk and increase financial losses (Khan et al., 2021). Protecting investors' and stakeholders' trust relationship is crucial from the banks' perspective. Ethical scandals carry an economic cost; eroding investor trust and greenwashing significantly threaten the strength of this relationship (Teichmann et al., 2023). Based on previous works, we hypothesise:

H1. Greenwashing increases a bank's reputational risk.

Miralles-Quirós et al. (2019) and Menicucci and Paolucci (2023) indicate variations in how investors value the ESG pillars, with environmental performance showing a positive and significant correlation with banks' financial and operating performance. In contrast, the social pillar has a significant negative association, decreasing accounting performance. These findings underscore the greater importance of the environmental pillar for financial stakeholders compared to the comparatively weaker relationship with social performance. However, social issues are becoming increasingly relevant in the financial sector, with particular regard to gender and labour conditions (Venturelli et al., 2024), potentially opening the door to ethical issues and reputational losses. Social washing, which involves misleading claims about health and safety, diversity and opportunity, employment quality, community and human rights, can significantly harm a bank's reputation. This harm is compounded by increasing scrutiny from stakeholders who expect genuine commitment to social issues and the protection of stakeholder interests. The adverse effects of social washing on reputation are evident through diminished trust and credibility among clients, investors and other stakeholders. This can lead to financial repercussions, such as reduced customer loyalty, higher costs of capital and potential regulatory penalties (Zasuwa & Wesołowski, 2023). The impact of social washing on reputational risk is particularly pronounced in an era where transparency and corporate accountability are paramount. Since banks that engage in social washing risk financial losses and long-term damage to their brand and stakeholder relationships (Marsat & Williams, 2014), we hypothesise:

H2. Social washing increases a bank's reputational risk.

This hypothesis builds on the recognition that banks must commit to social responsibility as societal expectations evolve to maintain their reputation and competitive edge. Failure to do so, through social washing practices, poses substantial reputational risks, potentially undermining the trust and loyalty of key stakeholders.

Furthermore, it is important to recognise that ESG washing strategies and their intensity may be influenced by various company-related factors, including governance aspects (Bernini & La Rosa, 2024). Consequently, we do not view governance as a domain for washing; instead, it is regarded as a specific internal characteristic of banks that can affect the quality and the volume of ESG disclosure, implementation strategies, and, consequently, ESG performance. Prior studies have emphasised the role of governance aspects, such as the number of independent directors and women on the board, as robust determinants in mitigating washing behaviour and increasing sustainable performance (D'Amato et al., 2023; Rossi et al., 2021; Venturelli et al., 2024; Zahid et al., 2023).

5 | RESEARCH DESIGN

This section describes our research design, which aims to test our hypotheses. Section 5.1 shows the path followed toward identifying and selecting the sampled banks. Section 5.2 introduces and operationalises our dependent, independent and control variables, while Section 5.3 shows our baseline estimation model.

5.1 | Sample selection and data source

To test our hypotheses, we identified a sample of listed banks for which information required from our empirical analysis was available granularly, with particular regard to ESG disclosure and performance scores, crucial for the computation of variables capturing banks' washing behaviour. Following this line of reasoning, we first started from 616 listed banks worldwide with a total market capitalisation exceeding US$1 billion, that is, the ones that offer the necessary level of information. Then, we proceeded to check their inclusion in Bloomberg and Refinitiv Eikon databases, identifying a total of 419 banks for which we were able to collect ESG-related data from both sources. Bloomberg and Refinitiv Eikon databases are widely used in the literature to assess aspects related to ESG dimensions. They offer extensive worldwide temporal and spatial coverage of companies and provide reliable ESG-related data. Through these databases, several scholars have identified and measured companies' greenwashing and social washing behaviour (e.g. Birindelli et al., 2024; Venturelli et al., 2024; Yu et al., 2020).

In 2014, Directive 2014/95/EU was enacted, endorsing the disclosure of relevant ESG factors in the non-financial disclosure section of companies' reports. Hence, we decided to focus the empirical analysis on the period starting from 2014 and ending in 2020, the last year in which reputational risk data from the RepRisk database were available.

For the final sample, we only selected banks for which it was possible to measure ESG washing behaviour over the entire observation period (2014–2020), thus excluding 87 banks for which data retrieved from Bloomberg contained missing values, 53 banks for which data retrieved from Refinitiv Eikon contained missing values and 159 banks for which we observed a lack of information from both data providers. The steps followed for sample selection are depicted in Table 1 and shown graphically in Figure 1.

The final sample consists of 120 listed banks active in 35 countries from 2014 to 2020. The sample is internationally representative, with the largest number of banks from Japan and the United States (Appendix S1, Figure S1). It represents a panel data set with 840 total bank/year observations, encompassing information related to Environmental and Social (ES) disclosure from Bloomberg, information about ES performance from Refinitiv Eikon, information concerning reputational risk from RepRisk, several financial data on bank-level characteristics from BankFocus and macroeconomic variables from the World Bank database.

TABLE 1 Sample selection strategy.

	Excluded banks	Included banks
First step: initial sample		
Listed banks globally with a total market capitalization exceeding 1 billion US$	–	616
Of which, included in Blomberg	187	429
Of which, included in Refinitiv Eikon	10	419
Second step: Focus on the period starting from 2014 and ending in 2020		
Of which, banks with data on ESG disclosure scores in the 2014–2020 period in Bloomberg	87	332
Of which, banks with data on ESG performance scores in the 2014–2020 period in Refinitiv Eikon	53	279
Of which, banks with data on ESG performance and disclosure scores in the 2014–2020 period in Bloomberg and Refinitiv Eikon	159	120
Final sample	–	120

5.2 | Variables

5.2.1 | Dependent variable

RepRisk, widely adopted in previous works (e.g. Choi et al., 2023; Gaganis et al., 2021; Sha'ban et al., 2022), is employed to gauge our dependent variable, reputational exposure. RepRisk evaluates the ESG risk-related reputational exposure of companies worldwide by collecting negative incidents, criticism and controversies from over 80,000 media outlets, stakeholders and third-party sources worldwide daily. This information is then distinguished according to their significance (major/minor), severity level and novelty (https://www.reprisk.com). The RepRisk Index (RRI) is graded on a scale of zero to 100, with maximum values indicating greater exposure to ESG risks. In our baseline model, we implement the yearly RRI as Sha'ban et al. (2022), which we named RepRisk.

5.2.2 | Independent variable

One of the challenges in the study of washing behaviour is its measurement. As emphasised by Bernini et al. (2023) and Bernini and La Rosa (2024), numerous challenges and uncertainties are inherent in creating and implementing an effective measurement instrument for washing activity. Given the multifaceted nature of washing, identifying it remains a complex task. Researchers have addressed this by developing tailored disclosure and performance indicators or exploring it through case studies.
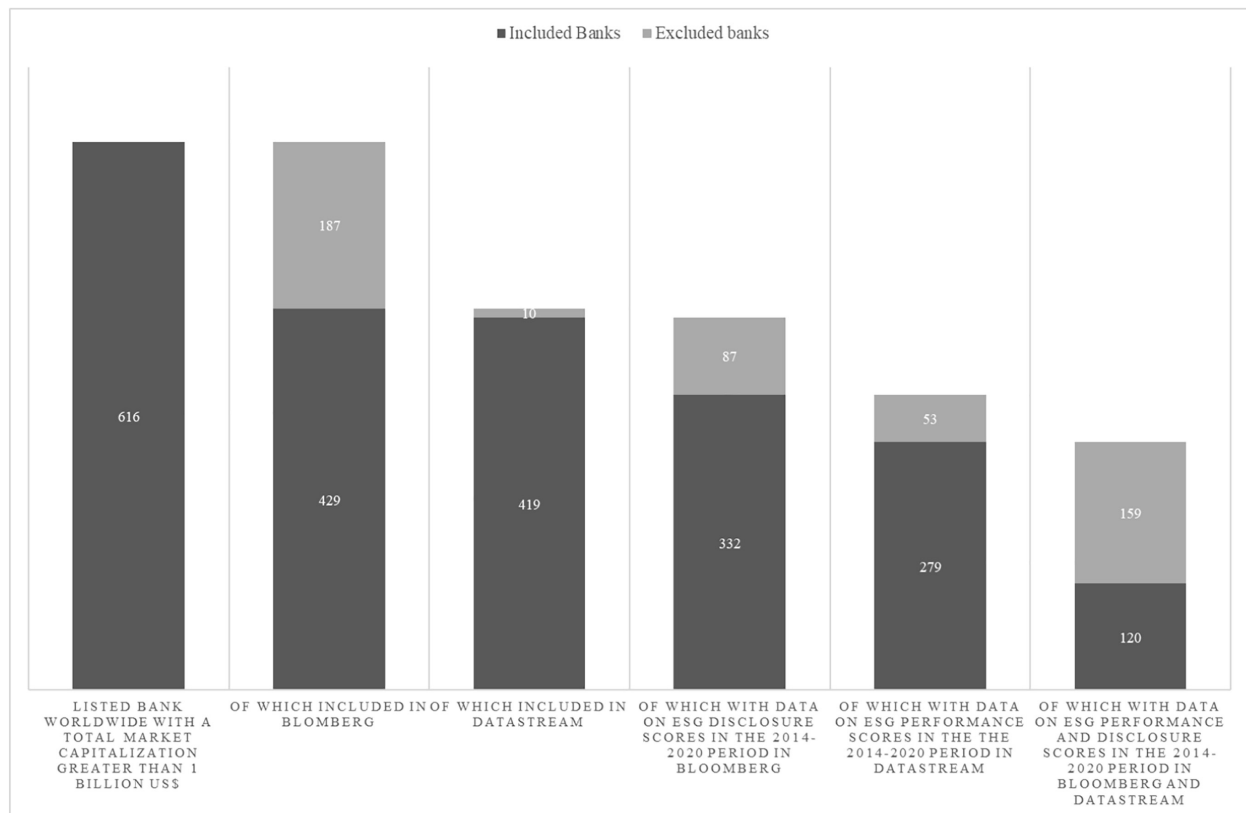
FIGURE 1 Sample selection strategy.

With the development and widespread adoption of ESG scores and ratings across all industries, they offer a valuable means of gauging the level of disclosure and performance, even within the banking sector (Miras-Rodríguez et al., 2020). Following the approach of Yu et al. (2020) and Birindelli et al. (2024), green and social washer banks are those that disclose their commitment to environmental and social issues yet demonstrate subpar performance in these areas. In line with previous studies, we focus solely on the 'E' (environmental) and 'S' (social) dimensions of ESG. This approach aligns with the literature's perspective that governance is the primary determinant of a bank's washing behaviour (e.g. Birindelli et al., 2018; Yang et al., 2020). In particular, the banks' yearly green and social washing scores are calculated as follows:

$$E\_washing_{i,t} = E\,disclosure_{i,t} - E\,performance_{i,t} \quad (1)$$

$$S\_washing_{i,t} = S\,disclosure_{i,t} - S\,performance_{i,t} \quad (2)$$

where E and S stand for 'Environmental' and 'Social', respectively. Disclosure information is retrieved from the Bloomberg database, while information related to performance is collected from the Refinitiv Eikon database. Disclosure and performance measures are divided by 100 and normalised before implementation, ensuring they operate on a uniform scale (Yu et al., 2020).

5.2.3 | Control variables

As control variables, we implemented several features related to governance quality. In particular, as explanatory variables, we include the percentage of independent directors (*Indep. Direct.*) as their presence is assumed to be related to the bank's socially responsible behaviour (Rossi et al., 2021), the dummy variable *ESG_Bonus* equals 1 when the bank adopts monetary incentives to the attainment of ESG targets (Hart et al., 2015), and the dummy variable *CEO_Duality*, which equals 1 when the CEO is also the chairman of the board of directors, since there is a risk of concentrated power. This concentration of power can potentially influence the accuracy and transparency of the bank's reporting (Rossi et al., 2021). In addition to these, we included several accounting bank-related control variables (Fiordelisi et al., 2013): the logarithm of total assets as a measure of bank size (Size); the return on equity as an indicator of financial performance (ROE) and the Tier 1 capital ratio as a measure of the bank's degree of capitalisation, labelled as T1_Capital. Furthermore, we controlled for economic development heterogeneity across countries by including the logarithm of GDP (Yu et al., 2020). Table 2 provides variable descriptions and operationalisation, while the correlation matrix is provided in the Appendix (Table S1). Table 3 presents the

TABLE 2 Variables description.

Variable name	Description	Source	Implementation
Dependent variable			
RepRisk	Bank's annual average reputational exposure	RepRisk	Baseline
RepRisk_6M	Bank's semiannual average reputational exposure	RepRisk	Robustness analysis
RepRisk_PEAK	The peak of the bank's reputational exposure within the year	RepRisk	Robustness analysis
Independent variables of interest			
E_washing	The difference between Bloomberg's Environmental disclosure score and Refinitiv Eikon's Environmental performance score	Bloomberg, Refinitiv Eikon	Baseline
S_washing	The difference between Bloomberg's Social disclosure score and Refinitiv Eikon's Social performance score	Bloomberg, Refinitiv Eikon	Baseline
E_level	The categorical variable is equal to (1) if the bank registers the environmental disclosure score above the median of the sample but also performs poorly on environmental aspects, (2) if the bank registers both the environmental disclosure and performance scores below the median of the sample, (3) if the bank registers the environmental disclosure score below the median of the sample, but outperforms other banks in the sample and (4) if the bank registers both the environmental disclosure and performance scores above the median of the sample	Bloomberg, Refinitiv Eikon	Robustness analysis
S_level	The categorical variable is equal to (1) if the bank registers the social disclosure score above the median of the sample but also performs poorly on social aspects, (2) if the bank registers both the social disclosure and performance scores below the median of the sample, (3) if the bank registers the social disclosure score below the median of the sample, but outperforms other banks in the sample and (4) if the bank registers both the social disclosure and performance scores above the median of the sample	Bloomberg, Refinitiv Eikon	Robustness analysis
Control variables			
Indep. Direct (%)	The share of independent board members	Bloomberg	Baseline
ESG_Bonus (d)	Dummy equals 1 if the bank implements an executive compensation scheme that links bonuses to the achievement of ESG targets and 0 otherwise	Bloomberg	Baseline
CEO_Duality (d)	Dummy equals 1 if the bank's CEO also serves as the chairman of the board, and 0 otherwise	Bloomberg	Baseline
Size	Bank's total assets measured in logarithmic form	BankFocus	Baseline
ROE (%)	The bank's return on equity ratio	BankFocus	Baseline
T1_Capital	The bank's Tier 1 capital as a percentage of risk-weighted assets	BankFocus	Baseline
GDP	Logarithm of the country's GDP per capita (PPP)	World Bank	Baseline
Moderating variables			
FFF	Dummy equals 1 if at least one Fridays for Future (FFF) event occurred in the country	https://fridaysforfuture.org/	Additional analysis
Legal	A dummy equals 1 for common law countries, 0 otherwise	World Bank	Additional analysis
Instrumental variables			
Corruption	At the country level, corruption measures the perceived extent of public power misuse for personal gain, covering minor to major corruption and elite control over the state. Ratings range from −2.5 to 2.5 standard deviation units	World Bank	Robustness analysis
pc_CO_2	The country-level CO_2 emissions per capita	World Bank	Robustness analysis

TABLE 3 Descriptive statistics.

	Obs.	Mean	Min.	P25	P50	P75	Max.	SD
RepRisk	840	16.76	0	5.5	17.5	24.33	65.08	13.06
RepRisk_6M	840	16.76	0	2.86	18.14	24.43	64.57	13.33
RepRisk_PEAK	840	30.26	0	20	32	41	80	17.07
E_washing	840	0	−1.96	−0.6	−0.14	0.44	3.16	0.94
S_washing	840	0	−2.1	−0.56	−0.1	0.38	3.45	0.88
% Indep. Direct	834	79.67	0	75	85.71	92.85	100	20.76
ESG_Bonus (d)	840	0.09	0	0	0	0	1	0.29
CEO_Duality (d)	839	0.13	0	0	0	0	1	0.33
Size (Euro billions)	839	426.06	3.21	46.02	97.81	548.2	3489.54	659.54
ROE (%)	830	9.12	−90.61	6.15	9.28	13.75	26.51	8.53
T1_Capital	743	14.57	6.5	12.28	13.7	16.29	34.1	3.72
GDP	835	1.59	−11.33	0.77	1.99	3	25.16	3.63

descriptive statistics. The mean value of the yearly average reputational exposure risk (RepRisk) is 17. This implies that banks in the sample have low reputational exposure. The average of green and social washing (E_washing and S_washing) is 0. This means that banks present an equal level of symbolic and substantive actions, and thus, in general, they are not "washers". In terms of governance characteristics, the banks in the sample present an average of 8 out of 10 independent directors. About 9% of banks adopt ESG incentives, and in only 13% of cases, the CEO also serves as chairman. On average, total assets (SIZE) are €426B. The averages of ROE and TIER 1 ratio for banks in our sample are 9.12% and 14.57%, respectively.

5.3 | Estimation model

To investigate the relationship between bank reputational risk and banks' ES washing behaviour, we performed two-panel regression models using FGLS (Feasible Generalised Least Square) with robust standard error (Reed & Ye, 2011; Yu et al., 2020). This method allows us to estimate the models in the presence of heteroskedasticity across panels, usually affecting data encompassing multiple countries. Analytically, the regression models are the following:

$$y_{i,t} = \beta_{EW} * E\_washing_{i,t-1} + \sum_{i=1}^{n} \beta_i X'_{i,t} + \mu_i + \delta_t * \gamma_c + \varepsilon_{i,t} \quad (3)$$

$$y_{i,t} = \beta_{SW} * S\_washing_{i,t-1} + \sum_{i=1}^{n} \beta_i X'_{i,t} + \mu_i + \delta_t * \gamma_c + \varepsilon_{i,t} \quad (4)$$

where pedicle $y_{i,t}$ is the dependent variable RepRisk for the ith bank in time t and X' is the vector of control variables at bank and country level. In both models, washing measures and control variables at the bank level are lagged by one period to address concerns regarding persistence and potential endogeneity arising from simultaneous factors affecting the dependent variable. Finally, μ_i are bank-fixed effects,

TABLE 4 The effect of green and social washing on bank reputational exposure.

	Dependent variable: RepRisk	
	Model 1	Model 2
lag(E_washing)	0.615**	
	(0.257)	
lag(S_washing)		−0.701***
		(0.235)
lag(% Indep. Direct)	−0.121***	−0.139***
	(0.034)	(0.033)
lag(ESG_Bonus)	0.422	0.629
	(1.133)	(1.100)
lag(CEO_Duality)	−0.551	−0.367
	(1.146)	(1.084)
lag(Size)	4.982**	4.763**
	(2.135)	(2.131)
lag(ROE)	−0.049	−0.060
	(0.037)	(0.037)
lag(T1_Capital)	−.0372**	−0.471***
	(0.171)	(0.171)
lag(GDP)	4.684	3.757
	(7.372)	(7.731)
Bank fixed effects	Yes	Yes
Time×Country fixed effects	Yes	Yes
Observations	621	621
Wald χ^2	14,713*** ($df=211$)	17,478*** ($df=211$)

**p<.01; ***p<.001.

$\delta_t * \gamma_c$ are time-fixed effects interacted by country-fixed effects and ε_{it} is the error term.

6 | EMPIRICAL RESULTS AND DISCUSSION

This section begins with the presentation of the baseline results (Section 6.1) and proceeds by further providing robustness and additional analyses in Section 6.2, which includes consideration of alternative measures of reputational risk and green and social washing, handling endogeneity issues through the identification of instrumental variables and the implementation of two-stage least squares estimations, and the study of moderation effects. Finally, in Section 6.3, the results are discussed.

6.1 | Baseline results

Table 4 (Models 1 and 2) presents the baseline results of the effect of green and social washing on bank reputational exposure. In Model 1, we find that for environmental issues, a higher level of symbolic disclosure than actual environmental performance leads to an increase in the banks' yearly reputational exposure ($\beta = .615$, p-value <.05). Conversely, Model 2 shows a negative and significant effect on social issues ($\beta = -.701$, p-value <.01). This means that negative consequences regarding incidents, criticism and controversies arise from environmental claims unsupported by performance, whereas excess disclosure on social issues reduces reputational exposure. This disparity might arise from varying perceptions and the distinct demands of stakeholders concerning the two pillars.

Regarding the control variables, in line with the literature, more independent directors and stronger capitalisation reduce banks' reputational exposure. The positive sign of the size variable suggests that larger banks are more exposed to reputational risk. Mixed results related to reputational risk among large firms are reported in the literature. While some studies argue that larger companies have greater resources to comply with sustainable practices with a positive effect on reputation, other studies suggest that large companies are also more likely to be involved in major scandals and, thus, more exposed to reputational risk (Talpur et al., 2023).

6.2 | Additional analysis and robustness

We conduct additional analyses and robustness tests to address the causal effect between green and social washing and banks' reputational exposure. In particular, as an additional analysis, we investigate whether Fridays for Future and the different legal systems in a country moderate the effect of green and social washing on banks' reputational exposure. To evaluate the robustness of our results, we investigate the likely impact of two alternative measures of reputational risk (dependent variable) and an alternative measure of green and social washing (independent variables) based on the levels of consistency between environmental and social disclosure

and performance. Moreover, we employ a two-stage least squares (2SLS) approach in the baseline model to address potential endogeneity issues.

6.2.1 | Additional analyses: The moderating role of Fridays for future and the legal system

The institutional context, which includes the social system, legal framework and the norms and regulations governing firms' activities and relationships with stakeholders, could either exacerbate or diminish washing strategies and their impact (Bernini & La Rosa, 2024; García-Sánchez et al., 2021). As a further additional analysis, we evaluated the novel role of "Fridays for Future" in conditioning the washing behaviour. "Fridays for Future" is a global climate strike movement founded by activist Greta Thunberg in 2018. People strike on Fridays to demand action on climate change from political leaders, aiming to raise awareness for stronger climate policies worldwide. Fridays for Future represents a form of scrutiny by external stakeholders, and literature shows that the monitoring of external stakeholders affects the impact of washing behaviour on companies' performance (García-Sánchez et al., 2021; Li et al., 2023). We introduced a dummy variable, FFF, equal to 1 if there has been at least one Fridays for Future (FFF) in that country. Table S3 in Appendix reports the annual frequency of FFF. We registered at least one FFF for almost the entire sample starting from 2018, when these events became widespread, with a peak in 2019.

Another variable of interest that explores the role of institutional context on washing consequences is the type of legal system. The two predominant legal systems globally are civil law and common law. The latter emphasises maximising shareholders' wealth, whereas civil law systems are inclined toward enhancing stakeholder value and pursuing long-term objectives; this orientation also leads to a heightened emphasis on responsible conduct (Liang & Renneboog, 2017). The 'Legal' variable is represented as a binary variable, taking the value of 1 when the legal system is based on common law and 0 otherwise. Within the sample, 29% of the countries have a common law system, 53% operate under a civil law system and 18% fall under other legal systems.

In Table 5, Models 1–4 display the results when we incorporate interactions with the variables 'FFF' and 'Legal' for E_washing and S_washing, respectively. In Models 1 and 2, when examining the primary effect of 'FFF', no significant difference in RepRisk is observed between banks in countries with at least one FFF event and those without. However, the interaction of E_washing and S_washing with 'FFF' is notably positive in both cases. Thus, within countries subjected to high scrutiny, both E_washing and S_washing increase banks' reputational exposure.

Similarly, in Models 3 and 4, no statistically significant difference in RepRisk is observed in assessing whether the legal system follows common law principles. Nonetheless, in the case of the common law system, a distinct, significantly negative interaction emerges with

TABLE 5 Additional analysis: The moderating role of Fridays for Future and the legal system.

	Dependent variable: RepRisk			
	Model 1	Model 2	Model 3	Model 4
FFF	−0.5775	−0.1330		
	(−1.55)	(−0.48)		
lag(E_washing)	−0.1536		1.0109***	
	(−0.46)		(3.20)	
lag(E_washing)×FFF	1.1912***			
	(3.08)			
lag(S_washing)		−0.3778*		−1.1590***
		(−1.87)		(−3.95)
lag(S_washing)×FFF		0.9407***		
		(4.15)		
Legal			8.2762	9.0867
			(0.32)	(0.35)
lag(E_washing)×Legal			−1.1403**	
			(−2.12)	
lag(S_washing)×Legal				0.8826*
				(1.94)
lag(% Indep. Direct)	−0.0558	0.0013	−0.1291***	−0.1381***
	(−1.11)	(0.03)	(−3.74)	(−4.14)
lag(ESG_Bonus)	−3.2862***	−4.1027***	0.4764	0.4319
	(−4.17)	(−5.55)	(0.42)	(0.38)
lag(CEO_Duality)	7.3939***	7.6741**	−0.4927	−0.6108
	(2.58)	(2.42)	(−0.43)	(−0.57)
lag(Size)	6.7159***	4.2191**	4.5812**	4.7679**
	(3.52)	(2.32)	(2.14)	(2.23)
lag(ROE)	−0.1133*	−0.1083*	−0.0470	−0.0628*
	(−1.81)	(−1.85)	(−1.27)	(−1.68)
lag(T1_Capital)	−0.8464***	−0.9350***	−0.3638**	−0.4423***
	(−4.26)	(−5.55)	(−2.14)	(−2.58)
lag(GDP)	−0.0883	−0.2154	4.9856	4.4848
	(−0.51)	(−1.25)	(0.68)	(0.59)
Bank fixed effects	Yes	Yes	Yes	Yes
Time×Country fixed effects			Yes	Yes
Observations	313	313	621	621
Wald χ^2	15,211***	13,378***	17,670***	15,398***
	($df=112$)	($df=113$)	($df=212$)	($df=212$)

*$p<.05$; **$p<.01$; ***$p<.001$.

E_washing and a positive one with S_washing. Specifically, within common law countries, where profit maximisation garners greater emphasis, the positive impact of 'E_washing' on banks' reputational exposure becomes negative. In contrast, the negative effect of 'S_washing' is attenuated, although the overall relationship's sign remains negative. To conclude, banks operating within the common law system that engage in environmental and social washing are less exposed to reputational risks.

6.2.2 | Robustness analysis: Alternative measure of dependent and independent variables

At first, as a robustness test, we considered two alternative measures of reputational exposure. The first alternative dependent variable we considered is RepRisk_6M, representing the half-year average of the RepRisk Index (Sha'ban et al., 2022). Moreover, following Andreicovici et al. (2018), we employed RepRisk_PEAK as

an alternative measure of reputational risk. This self-constructed peak metric represents the bank's peak RRI value at the end of the year. The methods applied are the same as those in Section 5.3, that is, Equations (3) and (4). The results indicate that as greenwashing increases, so does the banks' reputational exposure. On the other hand, the effect of social washing maintains its sign but loses its statistical significance (Table 6, Models 1 to 4).

In addition, we computed an alternative measure of green and social washing based on banks' environmental and social disclosure and performance scores. We follow Miras-Rodríguez et al. (2020) and Delmas and Burbano (2011), who identified different scenarios depending on the levels of consistency between environmental and social disclosure and performance. More specifically, based on whether they were positioned above or below the sample median

TABLE 6 Robustness analysis: Different dependent variables and alternative measures of green and social washing.

	Dependent variable: RepRisk_6M		Dependent variable: RepRisk_PEAK		Dependent variable: RepRisk	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
lag(E_washing)	0.691***		0.808**			
	(0.151)		(0.349)			
lag(S_washing)		−0.109		−0.466		
		(0.224)		(0.401)		
lag(E_level = 2)					−2.505***	
					(0.849)	
lag(E_level = 3)					−1.842**	
					(0.907)	
lag(E_level = 4)					−0.766	
					(0.589)	
lag(S_level = 2)						0.781
						(0.868)
lag(S_level = 3)						2.679***
						(0.881)
lag(S_level = 4)						1.677**
						(0.679)
lag(% Indep. Direct)	−0.035	−0.038	−0.085	−0.109**	−0.138***	−0.140***
	(0.039)	(0.044)	(0.053)	(0.052)	(0.034)	(0.033)
lag(ESG_Bonus)	1.206	0.945	−0.499	−0.013	0.542	0.649
	(1.338)	(1.304)	(1.531)	(1.519)	(1.129)	(1.082)
lag(CEO_Duality)	−0.448	−0.234	−1.245	−1.449	−0.694	−0.304
	(1.599)	(1.607)	(1.750)	(1.718)	(1.102)	(1.126)
lag(Size)	5.173***	5.843**	2.949	3.686	4.798**	5.130**
	(1.581)	(2.504)	(3.035)	(3.036)	(2.114)	(2.146)
lag(ROE)	−0.058*	−0.061*	−0.093*	−0.095*	−0.055	−0.056
	(0.032)	(0.034)	(0.057)	(0.056)	(0.038)	(0.037)
lag(T1_Capital)	−0.521***	−0.636***	−0.860***	−0.891***	−0.399**	−0.528***
	(0.176)	(0.191)	(0.276)	(0.275)	(0.173)	(0.175)
lag(GDP)	8.857	8.007	9.049	11.345	4.562	1.887
	(8.652)	(8.970)	(11.054)	(11.312)	(7.479)	(7.863)
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time × Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	621	621	621	621	621	621
Wald χ^2	14,713***	17,478***	56,837***	15,975***	8397***	9482***
	(df = 211)	(df = 211)	(df = 211)	(df = 211)	(df = 211)	(df = 211)

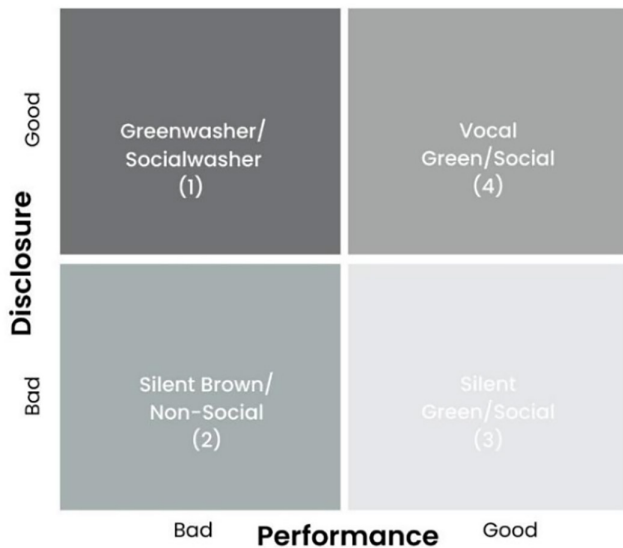*$p < .05$; **$p < .01$; ***$p < .001$.

FIGURE 2 Cluster derived from levels of consistency between environmental and social disclosure and performance.

values of disclosure and performance, for each year of observation, we categorised each bank into four distinct clusters (Figure 2). This allowed us to create two alternative variables for green and social washing, which we referred to as E_level and S_level, respectively. The categorical variable E_level can assume the following labels: (i) 1 if the bank's environmental disclosure score is above the median of the sample but performs poorly (below the median) on environmental aspects concerning other banks in the sample (i.e. a greenwasher bank); (ii) 2 if the bank's environmental disclosure and performance scores are both below the median of the sample (i.e. a silent brown bank); (iii) 3 if the bank's environmental disclosure score is below the median of the sample but it outperforms other banks in terms of environmental performance (i.e. a silent green bank) and (iv) 4 if the bank's environmental disclosure and performance scores are both above the median of the sample (i.e. a vocal green bank). Likewise, we introduced the categorical variable S_levels, which can assume the following values: 1 for a social washer bank, 2 for a silent non-social bank, 3 for a silent social bank and 4 for a vocal social bank. Table S2 in the Appendix presents the annual frequencies of banks' clusters according to their degrees of consistency between environmental and social disclosure and performance. In 2020, in the sample, 14% of banks are greenwashers and 12% are social washers, while the majority, 36% and 38%, are vocal green and social.

As previously, the methods applied are the same as described in Section 5.3 (Equations 3 and 4). Models 5 and 6 of Table 6 summarise the results of this additional analysis. Model 5 shows that vocal green banks (E_level = 4) and silent green banks (E_level = 3) experience a lower level of reputational risk exposure compared to greenwasher banks (E_level = 1 residual). On the other hand, Model 6 provides evidence that social washer banks are less exposed to reputational risk. These results confirm our previous findings and

support that inconsistency between environmental claims and actions exposes banks to higher reputational risk, while the opposite holds for social issues.

6.2.3 | Robustness analysis: Addressing endogeneity through instrumental variables

To address potential endogeneity issues, particularly those stemming from possible reverse causality between our green and social washing measures and banks' reputational exposure, we apply a two-stage least squares (2SLS) approach.

Specifically, for the variables E_washing and S_washing, we selected two instrumental variables: the level of corruption (Corruption) and the country-level CO_2 emissions per capita (pc_CO_2) derived from the World Bank database. The rationale behind the usage of these variables is that companies operating in countries with high levels of corruption and polluting emissions are more likely to engage in unethical practices to cut costs and enhance their competitive positioning in the market (Ioannou & Serafeim, 2010). Furthermore, it is improbable that the level of corruption and pollution emissions in a country would directly affect the reputational exposure of individual banks, thus meeting the exclusion criterion.

Table 7 reports the results of the 2SLS approach. Models 1 and 3 depict the first-stage estimations. As expected, Corrupt ($\beta = 1.064$, p-value <.01) shows a significant and positive relationship with E_washing, confirming the instrument's validity. This is not true for pc_CO_2, which seems not to be correlated with banks' greenwashing behaviour. Despite this, the validity of instrumental variables persists in the model. Several statistical tests further confirm this: the IV F-stat stands at 13.99 (exceeding the common threshold of 10) and is significant at the 1% level; the Anderson LM (p-value <.05), and both the Cragg–Donald F-statistic (10% maximal IV <23.35) and the Anderson–Rubin Wald test (p-value <.05). Additionally, the Sargan-Hansen test (p-value >.05) suggests no overidentification issues, while the Wu–Hausman F-test confirms the correct implementation of the instrumental variable approach. Consistent with the baseline results, the second-stage findings (Model 2) confirm that greenwashing positively and significantly influences banks' reputational exposure.

The first-stage estimations with S_washing as the dependent variable are shown in Model 3. Interestingly, the most relevant instrument for social washing is pc_CO_2, which shows a negative and significant coefficient ($\beta = -.204$, p-value <.05). We surmise that in countries with higher levels of polluting emissions, public attention is diverted from social issues, thus reducing the urgency for companies to adopt social washing practices. Nevertheless, pc_CO_2 remains a valid instrument, while corruption doesn't affect S_washing. The second-stage regression results (Model 4) show that social washing adversely affects banks' reputational exposure, thus confirming the findings of our baseline model.

TABLE 7 Robustness analysis: 2SLS estimations.

	Dependent variable: E_washing	Dependent variable: RepRisk	Dependent variable: S_washing	Dependent variable: RepRisk
	First stage (Model 1)	Second stage (Model 2)	First stage (Model 3)	Second stage (Model 4)
Corruption	1.064***		0.496	
	(0.373)		(0.378)	
pc_CO_2	0.108		−0.204**	
	(0.095)		(0.095)	
lag(E_washing)		6.062**		
		(3.029)		
lag(S_washing)				−8.429*
				(4.858)
lag(% Indep. Direct)	−0.012*	−0.066	−0.003	−0.162*
	(0.007)	(0.079)	(0.007)	(0.080)
lag(ESG_Bonus)	0.125	−0.376	0.626***	3.756
	(0.202)	(2.245)	(0.202)	(4.040)
lag(CEO_Duality)	−0.246	3.789	−0.023	2.429
	(0.223)	(2.471)	(0.226)	(2.731)
lag(Size)	0.674*	−3.581	0.163**	2.004
	(0.263)	(3.629)	(0.264)	(3.209)
lag(ROE)	−0.006	0.027	−0.006	−0.054
	(0.006)	(0.066)	(0.006)	(0.079)
lag(T1_Capital)	0.031**	−0.939***	−0.013	−0.545*
	(0.026)	(0.313)	(0.026)	(0.314)
lag(GDP)	0.003	−0.683	−0.001	−0.767**
	(0.027)	(0.284)	(0.027)	(0.328)
Bank fixed effects	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes
Observations	621	621	621	621
Anderson LM statistic	15.029***		7.622**	
IV F-stat	13.99***		10.62***	
Cragg-Donald F-statistic	23.35		20.48	
Stock and Yogo (2005) ID test for critical values: 10% maximal IV	19.93		19.93	
Anderson-Rubin test (*p*-value)	.008		.012	
Wu–Hausman test (*p*-value)	.009		.009	
Sargan-Hansen test (*p*-value)	.189		.344	

*$p < .05$; **$p < .01$; ***$p < .001$.

6.3 | Discussion

This study examines the extent of banks' involvement in ESG washing practices and the impact of greenwashing (H1) and social washing (H2) on their reputational exposure. Our sample reveals that, on average, banks are not involved in washing behaviour. Nonetheless,

ESG washing—an excessive disclosure of environmental and social efforts relative to actual performance—impacts the reputational risk of banks. For environmental issues, when disclosure exceeds performance, it affects the risk of adverse incidents, criticism and controversies, confirming H1. In contrast, reputation risk decreases when performance does not match social disclosure, suggesting that H2

is not confirmed. However, we analyse additional institutional factors, including citizen scrutiny (i.e. Fridays for Future) and the legal system. Our findings indicate that social and greenwashing harm a bank's reputation in countries where Fridays for Future is active, confirming H2. In contrast, in common law jurisdictions, reputational risk is reduced.

Our results show that ESG washing increases a bank's reputational risk, but its effects vary depending on the specific pillar under consideration. The disclosure of increased environmental claims not backed by performance amplifies reputational risks. In contrast, considerable symbolic disclosure regarding social issues reduces reputational risk. These findings highlight the market's sensitivity toward green claims compared to social ones. Concerning bank characteristics, institutions with higher capital adequacy, better financial performance, and more independent directors are less exposed to reputational risks.

Institutional conditions amplify or mitigate the impact of green and social washing on banks' reputational risk. In particular, in countries with high citizen scrutiny, as indicated by movements like Fridays for Future, environmental and social washing lead to an increase in reputational risk. Conversely, in common law jurisdictions, banks that engage in green or social washing are less exposed to reputational risk. Finally, to address potential endogeneity issues, we use corruption and the country-level CO_2 emissions per capita as instrumental variables for our estimations, and our results remain robust and consistent.

The different impacts of environmental and social washing on reputational exposure depend upon how the two themes are perceived. As Miralles-Quirós et al. (2019) affirmed, investors assign different values to the environmental and social pillars, with a notable emphasis on the environmental aspect compared to the social one. In our study, the reputational impact of social washing is negligible compared to the notable impact of greenwashing. As environmental practices gain societal importance (Montgomery et al., 2023; Santos et al., 2023a), banks face substantial pressure to align with stakeholders' expectations about green claims. Khan et al. (2021) and Sun et al. (2023) confirm that the banking sector tends to exhibit more symbolic than substantive disclosure about environmental issues to bolster public image. Consequently, banks might be tempted to exaggerate their environmental efforts to address growing demands, potentially affecting their reputational risk.

Regarding social issues, an excessive symbolic disclosure of social themes positively influences a bank's reputation. As supported by Seele and Gatti (2017), the negative consequences of washing behaviour are minimised without external accusation. Currently, a key challenge facing the social aspect is the lack of easily verifiable indicators or established thresholds for investors and other stakeholders to assess a bank's social commitment. This information asymmetry makes the social domain subjective and challenging for the market to detect washing behaviour. Adopting the signalling theory lens, external stakeholders do not have the tools to identify the gap between social disclosure and performance in the case of social issues. For this reason, banks that engage in washing may exploit information asymmetries to benefit from a symbolic social disclosure. Our results reveal that ESG

washing effects operate within a dynamic context, including multiple stakeholders' demands and different ways of perceiving ESG pillars.

Finally, looking at the literature that highlights the role of the institutional context in deepening or reducing washing strategies and their effects (Bernini & La Rosa, 2024; García-Sánchez et al., 2021; Li et al., 2023), the results show that in countries with high citizen scrutiny (in particular by NGOs, as indicated by the presence of Fridays for Future movements), reputational risks derived from both environmental and social washing are exacerbated. Conversely, in common law jurisdictions where the priority is maximising shareholder wealth and there is less interest in responsible conduct (Liang & Renneboog, 2017), banks engaged in washing are less exposed to reputational risk.

While previous studies have predominantly delved into the causes of washing behaviour, our study takes a fresh perspective by investigating the potential impact of ESG washing on a bank's reputational exposure, a less developed research area (Santos et al., 2023b; Talpur et al., 2023). These findings align with the stakeholder and legitimacy perspectives on washing activity (Schons & Steinmeier, 2016; Testa et al., 2018). Banks risk losing legitimacy and credibility among stakeholders when prioritising symbolic actions over substantive measures, especially concerning environmental issues.

7 | SUMMARY AND CONCLUSION

7.1 | Summary of findings

This study examines the reputational risk of ESG washing in the banking sector. ESG washing is defined as reporting environmental and social performance that does not match the bank's actual performance in these areas. We find that greenwashing negatively affects reputation, while social washing positively affects it.

Our findings suggest that the differences may be because (1) the environmental performance of banks is typically objective, quantifiable and readily accessible in the market. This transparency aids stakeholders in discerning banks that may engage in greenwashing practices; (2) information asymmetry between stakeholders and banks and the difficulties in monitoring social performance make the identification of social washing less likely, so we argue that social washing is less prone to detection and less likely to be penalised in terms of reputational risk and (3) institutional aspects such as the legal system and stakeholder scrutiny amplify or mitigate the impact of green and social washing on banks' reputational risk. Indeed, banks in countries with high stakeholder expectations as to the natural environment (proxied by the presence of Fridays for Future) result in significant reputational risks in the case of both social and greenwashing. These findings introduce ESG washing in the banking industry, supporting the necessity for accurate and validated information regarding both green and social claims in all economic sectors.

7.2 | Theoretical implications

The theoretical implications are as follows. H1 and H2 posit that differences between symbolic and substantive actions on both environmental and social pillars negatively impact bank reputational exposure. Our findings reveal that the effect varies depending on the pillar under consideration. This extends signalling and stakeholder theories, highlighting that the consequences of ESG washing depend on the specific pillar.

In contexts marked by information asymmetry, such as those between banks and the market, the signalling function of environmental performance has evolved to become more comprehensive and easily monitored over time. In contrast, the social aspect remains comparatively ambiguous. Previous studies have suggested that symbolic actions are particularly effective when performance evaluation is complex (Christmann & Taylor, 2006).

Even though some works highlight a possible negative relationship between social washing and reputation (Marsat & Williams, 2014; Zasuwa & Wesołowski, 2023), the high information asymmetry between a bank's social activities and stakeholders' limited expertise in evaluating social disclosure and underlying performance (Li et al., 2023; Lyon & Maxwell, 2011) makes it challenging to identify social washing. Furthermore, drawing from stakeholder theory, Schons and Steinmeier (2016) emphasise that the impact of inconsistency between social words and deeds on a company's financial performance varies by stakeholder type. Stakeholders with low proximity to the company's operations, such as the general public, may struggle to distinguish between rhetoric and genuine actions. Conversely, those with high proximity, such as employees and managers, are better equipped to assess these strategies. Consequently, the disparity between social claims and actions may be more evident to high-proximity stakeholders than the broader market or general investors. Banks are more likely to gain positive reputational exposure on social disclosure when investors are less engaged, distracted and distant from the social issue.

7.3 | Managerial and policy implications

In the banking system, reputational risk is closely related to systemic risk. Cai et al. (2018) report that interconnectedness can affect financial stability through various forms of contagion: direct linkages, commonality of asset-holding and information contagion. Direct linkages, specifically, can play a pivotal role when banks share risky instruments (De Novellis et al., 2024), and the same principle may apply in the context of reputational risk. Reputational damage can increase uncertainty, influence market dynamics and reduce market liquidity. The subsequent reaction through fund withdrawals and asset-selling amplifies systemic risk with a cascading effect. Moreover, banks with a damaged reputation face an increased counterparty risk in financial activities. These factors may compel regulatory authorities to implement significant

measures to reinstate confidence and stability. Although these measures are designed to tackle specific issues, they may occasionally affect the entire financial system, thereby contributing to systemic risk through the erosion of trust in the financial system. In line with the European Commission (2022) and SEC (2022) recommendations, our findings support the need for more standardised and verified information about ESG issues in all economic sectors and among data providers to avoid contagion effects. Our results also directly relate to issues around bank vulnerability and macroprudential measures. In this regard, our study lays the groundwork for identifying exposure to ESG reputational risk, providing supervisory authorities with a fundamental tool for accurately identifying systemic risk.

From a practical and managerial standpoint, this study provides novel evidence of the impact of ESG washing on bank reputation exposure. Banks are aware that reputational risks threaten their competitiveness and survival. In the banking sector, reputational risk has emerged as a paramount concern, especially after the financial crisis. For this reason, banks should carefully consider these risks to align their stance on ESG disclosure with performance, thereby contributing to their value-creation processes. However, reputational risk management frameworks still need to be developed (Fiordelisi et al., 2013) and updated to address recent challenges in the ESG domain. Typically, these frameworks have been employed to mitigate losses following scandals rather than being strategically oriented with long-term objectives (Adeabah et al., 2023). Our research highlights the importance of crafting appropriate models for reputational risk associated with ESG washing. Developing these models would facilitate the management and prevention of potential reputational damages.

7.4 | Limitations and avenues for future research

Although our study offers valuable insights, it is important to acknowledge its limitations, which suggest future research opportunities. First, future research could improve our results by exploring and designing alternative ESG washing measures through different data providers or methodologies while addressing sample limitations and extending the study's timeframe. Second, unobservable characteristics across banks may affect their level of ESG washing. In our study, we adopt bank, time and country as fixed effects and lagged variables to control for endogeneity, but there may still be bias from omitted variables. Third, we could not extend the analysis beyond 2020 due to data availability limitations. Future research could extend the period of analysis to investigate whether the increasing awareness of environmental and social issues resulting from recent regulatory interventions across different countries, such as the EU social taxonomy or the EU proposal for a directive on green claims (March 2023), as well as from the Covid-19 pandemic (Severo et al., 2021), further exacerbates the negative effects that washing practices can have on banks' reputational heritage.

Furthermore, as mentioned in the section on policy implications, this study lays the groundwork for investigating exposure to reputational risk that incorporates ESG washing considerations. This might be a banking-level indicator used in conventional systemic risk models, specifically those exploring networks. Finally, our research could be extended by developing a methodology that could determine the characteristics that may influence a bank's decision over time to engage in ESG washing or to advocate for ESG principles actively within a dynamic setting. This would entail studying the underlying transition process between ESG washing and actively making real ESG efforts.

CONFLICT OF INTEREST STATEMENT
The authors have no conflicts of interest to declare. All co-authors have seen and agree with the contents of the manuscript and there is no financial interest to report. We certify that the submission is original work and is not under review at any other publication.

DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available from the corresponding author upon reasonable request.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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