Mapping the Ethical Risk Landscape in Wholesale Green Bond Markets

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Contents

1 Introduction

Green bonds are fixed-income instruments designed to raise capital for projects with positive environmental outcomes. In the last few years, the green bond market has grown rapidly, as the outstandings surged from approximately $500 billion in 2018 to nearly $3 trillion in 2024 (Bank for International Settlements 2024). As the market matures, assessing its underlying risks becomes critical to safeguarding its integrity.

This report focuses on the wholesale green bond market, as the majority of climate finance mobilization occurs through them, underscoring their systemic significance in achieving sustainability goals (Climate Policy Initiative 2022). Furthermore, wholesale markets often involve more complex instruments, lower regulatory visibility, and reliance on self-disclosure, making them more vulnerable to strategic misrepresentation and agency problems (OECD 2017).

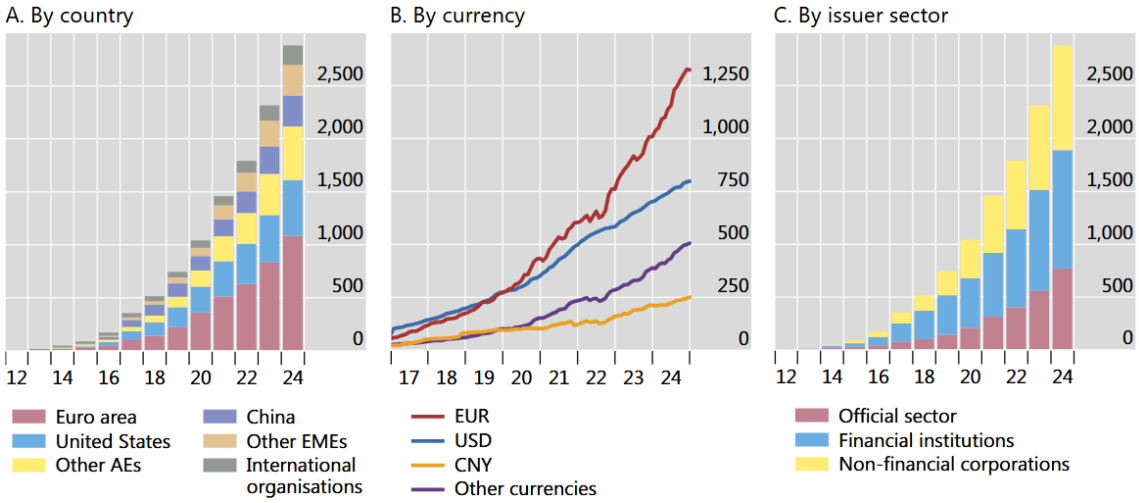

Figure 1: Growth of the green bond market by country, currency, and issuer sector. *Source: BIS Quarterly Review, March 2024.*[1]

2 Risks in the Green Bond Market

2.1 Greenwashing and Disclosure Gaps

A major ethical concern in the green bond market is greenwashing—the practice whereby firms disclose environmentally positive metrics while omitting more damaging indicators. Marquis et al. (2015) identify selective disclosure as a key strategy that enables firms to appear environmentally responsible without making meaningful changes. Their cross-national study shows that such symbolic reporting is particularly common in environ-

[1]Compiled using data from the Climate Bonds Initiative, Dealogic, Environmental Finance Bond Database, S&P Trucost, and independent calculations by the authors of the BIS report.

ments with limited external oversight. This echoes the findings of Egan et al. (2019), who show that misconduct in financial institutions often clusters and persists over time, pointing to deeper failures in oversight and incentives.

To mitigate this risk, regulators should introduce mandatory post-issuance reporting focused on material environmental outcomes. These disclosures should follow standardized indicators and be subject to independent third-party verification. As Delmas & Burbano (2011) argue, such oversight limits the scope for symbolic compliance and shifts incentives toward more credible and measurable environmental performance.

2.2 Lack of a Universally Accepted Standard

The absence of a single binding definition of "green" presents another challenge. Deschryver & de Mariz (2020) and Freeburn & Ramsay (2020) highlight that the existence of multiple voluntary frameworks, such as the ICMA Principles, CBI Standards, and region-specific taxonomies, has led to inconsistent eligibility thresholds and poor comparability between issuances. This regulatory fragmentation increases due diligence costs for investors and creates space for issuers to make questionable environmental claims. Fehr & Schmidt (1999) show that in the absence of enforceable norms, fairness tends to erode, as seen in their ultimatum game experiments. Similarly, without a common standard in green finance, outcomes can drift away from environmental goals.

A pragmatic step forward would be to encourage international coordination on green definitions through formal regulatory platforms such as the G20 or IOSCO.

2.3 Lack of Financial Incentives for Issuers

A recurring barrier to green bond issuance is the uncertain financial benefit. Deschryver & de Mariz (2020) show that many issuers perceive green bonds as costly and administratively demanding, particularly in the absence of a clear pricing advantage or "greenium." This discourages market participation. Bartling et al. (2015) reinforce this with experimental evidence: fair products lose market share as their production cost increases, even when buyers care about externalities. The study highlights how competitive pressure can crowd out socially responsible behaviour when incentives are not aligned. Similarly, in green finance, relying solely on reputational or moral benefits is often insufficient.

A targeted policy solution would be to offer financial incentives such as fee waivers, partial guarantees, or tax-based instruments to offset the higher costs of issuance and increase the participation of credible, climate-aligned borrowers.

	Challenge #1	Challenge #2	Challenge #3
Issuer	Costly process	Lack of internal capacity to manage the green bond process	Complex regulation and rules to follow
Investor	Lack of supply in terms of projects	Fear of greenwashing / reputation	Costly process
Intermediary	Fear of greenwashing / reputation	Lack of supply in terms of projects	Lack of standardization

Table 1: Overview of top challenges faced by key green bond market participants. *Source: Based on interviews with experts across issuers, investors, and intermediaries, conducted by Deschryver & de Mariz (2020).*

2.4 Reputational Risk and Market Response

Lebelle et al. (2020) show that equity investors, especially in developed markets, react sharply[2] when a firm's green bond issuance plan is suspected of green-washing – imposing an implicit "reputational tax" on the issuer. Thanassoulis (2023) offers a theoretical underpinning for this dynamic: in his three-stage model, firms weigh the profit gains from misconduct against expected penalties, which include both formal fines and reputational costs. These penalties are shaped by the volume and margin of the misconduct and are amplified by the probability of detection (ϕ) and the penalty severity (δ). Developed markets, with stronger disclosure rules and greater media oversight, tend to elevate both ϕ and δ—raising the expected cost of misconduct. Therefore, greenwashing in such settings triggers sharper investor backlash, as seen in Lebelle et al. (2020)'s event study.

3 Conclusion

Encouraging broader participation from emerging economies is essential for scaling the global green bond market and meeting long-term climate goals. However, small countries often face structural constraints such as low issuance volumes, high transaction costs, and limited institutional capacity (Banga 2018).

One viable path forward is the strategic use of partial guarantees and blended finance to de-risk investment, as demonstrated by the Amundi–IFC Emerging Green One (EGO) fund, which captures emerging market debt premiums while managing downside risk

[2]Lebelle et al. (2020) analyze a sample of 475 corporate green bond issuances by 145 unique firms, drawn from an initial set of 2079 green bonds issued between 2009 and 2018. They find that the stock market reacts negatively to green bond announcements, particularly on the announcement day and the following day, with cumulative abnormal returns ranging from -0.5% to -0.2%.

through a first-loss buffer and portfolio diversification (Deschryver & de Mariz 2020). Second, regulatory frameworks should support the development of **transition bonds**, enabling high-emitting firms to gradually finance their shift toward greener operations under structured guidelines and short-term accountability targets (Takatsuki & Foll 2019). These instruments, if clearly labelled and backed by credible disclosure aligned with climate transition pathways, can broaden issuer participation without diluting market credibility. Finally, pooled green bond platforms, supported by multilateral banks, can help standardise issuance processes and reduce transaction costs. Together, these tools can unlock capital, manage reputational risk, and ensure that small issuers from emerging economies are not excluded from shaping a credible, inclusive climate finance architecture.

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