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# The Effects of Green and Social Bond Issuance on Firms' ESG Performance

Green and social bonds are debt instruments used exclusively to fund environmentally and socially positive projects, respectively. Due to the dominance of green bonds in the ESG bonds market, they have been far more studied than other instruments. Several studies examining whether green bonds provide a financial advantage over conventional bonds, termed as greenium (e.g. Larcker and Watts, 2020; Flammer, 2021; Huang et al., 2023; Caramichael and Rapp, 2024; Zaghini, 2024). A greenium could reduce capital costs for green investments, potentially enabling otherwise unprofitable projects and accelerating green transitions. Recent evidence from the academic literature (Huang et al., 2023; Caramichael and Rapp, 2024; Zaghini, 2024) and market practitioners suggests that a greenium is materialising.

Another stream of literature investigates whether firms that issue green bonds demonstrate improved environmental performance after issuance, relative to non-issuers. Some firms may issue green bonds for projects with marginal environmental gains, while others finance transformative projects through conventional instruments. Emerging literature examines firms' environmental performance post-issuance (Flammer, 2021; ElBannan and Löffler, 2024; Joel et al., 2025), pointing to a positive effect.

Complementing the existing post-issuance literature, we investigate whether firms that have issued green or social bonds were, prior to issuance, already showing differences in performance on the environmental and social dimensions, respectively. We focus on firms that have issued green or social bonds between 2013 and 2024, following a similar approach to Flammer (2021); Joel et al. (2025); ElBannan and Löffler (2024). We pair each firm that has issued ESG bonds with a firm in the same industry and country of domicile that has not issued ESG bonds. To identify the closest contrafactual, we use a nearest-neighbour approach based on key financial metrics and ESG scores (for the year before issuance and its pre-trend). For each matched pair, we compute the average change in environmental pillar scores and carbon intensity for green bond issuers, and in social scores for social bond issuers, from the earliest year in which ESG data are available for both firms up to the bond issuance year.

We find that companies that have invested in green (resp. social) bonds have, on average, higher environmental scores and carbon intensity (resp. social scores) before issuance, i.e., higher slopes, and also higher levels of these values. In our sample, we also observe that there is no statistically significant difference in the evolution of environmental (resp. social) metrics after the issuance of the ESG bonds. The empirical findings suggest that corporations use the issuance of green and social bonds to signal their commitment to addressing environmental and social risks, rather than to signal a change in their approach to these risks.

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## References

J. Caramichael and A. C. Rapp. The green corporate bond issuance premium. *Journal of Banking & Finance*, 162:107126, May 2024. ISSN 0378-4266. doi: 10.1016/j.jbankfin.2024.107126.

M. A. ElBannan and G. Löffler. How effectively do green bonds help the environment? *Journal of Banking & Finance*, 158:107051, Jan. 2024. ISSN 0378-4266. doi: 10.1016/j.jbankfin.2023.107051. URL https://www.sciencedirect.com/science/article/pii/S0378426623002376.

C. Flammer. Corporate green bonds. *Journal of Financial Economics*, 142(2):499–516, Nov. 2021. ISSN 0304-405X. doi: 10.1016/j.jfineco.2021.01.010.

C.-Y. Huang, D. Dekker, and D. Christopoulos. Rethinking greenium: A quadratic function of yield spread. *Finance Research Letters*, 54:103710, June 2023. ISSN 1544-6123. doi: 10.1016/j.frl.2023.103710.

T. N. Joel, H. Zheng, and B.-Y. Liu. Cross-region analysis of the environmental performance of green bond issuers. *Finance Research Letters*, 75:106926, Apr. 2025. ISSN 1544-6123. doi: 10.1016/j.frl.2025.106926. URL https://www.sciencedirect.com/science/article/pii/S1544612325001904.

D. F. Larcker and E. M. Watts. Where's the greenium? *Journal of Accounting and Economics*, 69(2):101312, Apr. 2020. ISSN 0165-4101. doi: 10.1016/j.jacceco.2020.101312.

A. Zaghini. Unconventional green. *Journal of Corporate Finance*, 85:102556, Apr. 2024. ISSN 0929-1199. doi: 10.1016/j.jcorpfin.2024.102556.