Referee Report: *Did ESG Affect the Financial Performance of North American FMCG Firms in The Second Period of The Kyoto Protocol?*

Overall assessment. This paper investigates an important question and the results provided are worth documenting. In fact, the findings speak to the ongoing debate on whether ESG factors affect shareholders' welfare (and in what direction).

Despite the generally positive outlook, the paper is not publishable in its present form. There are major issues with the present exposition and empirical analysis that should be addressed in order to meet the rigor standards expected of a scholarly work. In the following paragraphs, I provide my comments on how to improve the exposition of the paper and the strength of the internal validity of the analysis. I urge the authors to incorporate all my comments in detail.

Overall exposition. This is an editorial comment, but I am raising it first since it relates to the readability of the paper. The present version of the manuscript is too heavy on abbreviations and acronyms. Abbreviations are helpful when a concept is novel (in which case, the authors first introduce the abbreviation and then use it throughout the paper) or when it relates to a well-known construct. For example, terms like ESG and GDP can be used throughout the paper because they are part of the knowledge domain of most scholars and policymakers. However, the authors do not need to introduce an abbreviation for "Corporate Financial Performance"—just refer to it as "corporate financial performance, rather than "CFP." Moreover, the authors don't need an abbreviation for "North American" (NAn) (any minimally informed person knows what "North American" stands for). The excessive use of abbreviations makes the paper very hard to read, so I encourage the authors to only use them when strictly necessary.

To illustrate my point, imagine a reader who is unfamiliar with the present work but proficient in corporate finance and/or ESG topics. How would that reader react to a statement such as the following hypothesis: *"ESG has a positive and significant impact on the CFP of FMCG firms in NA."* Now compare it with an alternative version: "ESG has a positive impact on the financial performance of fast-moving consumption-goods firms in North America." It stands to reason that the latter is clearer. In addition to removing unnecessary abbreviations, the authors should be concise in their writing. It is not necessary to say "corporate" in "corporate financial performance" when the sentence makes it clear that the financial performance in question relates to firms.

Related to the paper's hypothesis, I do not understand the rationale for stating them in a directional form (even less with a positive sign). There are important policy debates about ESG having an unclear (or even potentially value-destroying) effect on firm value (Edmans, 2023). Given that there are reasonable arguments for both directions, it is more reasonable to state hypotheses in null form and take an agnostic stance, letting the data speak for itself.

The next three points relate to the caveats of the paper regarding omitted factors.

ESG institutional investors. One important aspect that the paper neglects is the effect of ESG institutional investors driving capital flows to firms with high ESG scores. To wit, the assets under management by ESG funds increased exponentially over the past decades, as documented by Dantas (2021). In this case, it can be the case that the positive effect on firm performance is not directly due to ESG activities, but to capital flows from ESG investors. In other words, the authors currently interpret their findings of firms with high ESG scores being more profitable as if ESG itself positively affect firms' profitability. The alternative view is that firms with high ESG scores were the ones that attracted more capital flows from ESG investors (Dantas, 2021).

This is a critically important point and should be discussed as such. While I cannot see how one could disentangle the two effects, the authors should at the very least add a section in the paper titled "caveats" wherein they discuss this alternative interpretation in light of the findings of Dantas (2021).

Implicit guarantees and bank credit. In addition to the role of ESG investors, since the period comprises the aftermath of the Global Financial Crisis and the COVID–19 pandemic, it is important to note that North American economies (notably the US) was engaging in massive fiscal and monetary stimuli, which in turn should have positively affected firms' financial performance. Fiscal stimuli weaken implicit guarantees, which in turn leads to less credit supply (Dantas et al., 2023). This is a point that should also be included as a caveat: weaker government guarantees lead to banks' shrinking credit (Dantas et al., 2023), which in turn create incentives for firms to go to equity markets to finance their projects. Given the monetary stimuli, the cost of equity capital is lower and stock prices can appreciate regardless of reported ROEs.

Policy uncertainty. The last factor that the authors should discuss as a caveat is the role of policy uncertainty (Campello and Kankanhalli, 2024). Uncertainty affects corporate financial performance through its real options value and depletion of reversible capital investments (Campello and Kankanhalli, 2024). Given that the sample includes major events such as the Brexit referendum (which had important spillovers for North American firms Campello et al., 2022) and the onset of the COVID–19 pandemic, it is possible that firm performance and ESG investments are moving together due to uncertainty and increasing popularity of ESG moving together during the period.

Fixed effects. Throughout the paper, the authors state that they compare fixed-effects and random-effects models. However, they do not inform what fixed effects are included in the models. Do the fixed-effects models comprise both time and firm fixed effects? The authors should be more precise when describing their analyses.

References

Campello, M., G. S. Cortes, F. d'Almeida, and G. Kankanhalli (2022). Exporting Uncertainty: The Impact of Brexit on Corporate America. *Journal of Financial and Quantitative Analysis*. DOI: https://doi.org/10.1017/S0022109022000308.

Campello, M. and G. Kankanhalli (2024). Corporate decision-making under uncertainty: review and future research directions. *Handbook of Corporate Finance*, 548–590. https://doi.org/10.4337/9781800373891.00025.

Dantas, M. (2021). Are ESG Funds More Transparent? *Available at SSRN 3269939*. DOI: http://dx.doi.org/10.2139/ssrn.3269939.

Dantas, M., K. J. Merkley, and F. B. G. Silva (2023). Government Guarantees and Banks' Income Smoothing. *Journal of Financial Services Research 63*(2), 123–173. DOI: https://doi.org/10.1007/s10693-023-00398-3.

Edmans, A. (2023). Applying economics–not gut feel–to esg. *Financial Analyst Journal*. DOI: https://doi.org/10.1080/0015198X.2023.2242758.