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THE EFFECTS OF MANDATORY ESG DISCLOSURE REGULATION ON COMPANY AND INVESTOR BEHAVIOUR: AN EXPERIMENTAL APPROACH

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Overview

In the last two decades, companies' environmental, social and governance (ESG) information began to draw increasing attention from various stakeholder groups, e.g., customers, suppliers, or investors, and thus companies started to disclose this kind of information on a voluntary basis. These movements have also motivated the European Union (EU) to regulate this kind of information disclosure under the Non-Financial Reporting Directive (NFRD) in 2014, thus increasing relevance, comparability, and consistency of disclosed information. While the NFRD can be regarded as first attempt to introduce standardised ESG-related reporting in the EU, a new directive is already being prepared, namely the Corporate Sustainability Reporting Directive (CSRD), to further support the EU Green Deal. While the CSRD will come to effect earliest in 2025, its aim is to increase the current requirements in terms of reporting content, scope and affected companies. For instance, the number of affected companies increases from roughly 12,000 to more than 50,000 and companies are required to be certified by an external and independent auditor. As can be seen, a considerable amount of bureaucratic effort will be required going forwards, both on regulator side for development and enforcement of the regulation and on company side for compliance with those new rules. While the introduction of such mandatory reporting is on the one hand corroborated by various authors who find regulations to assure a standardisation of disclosed information, make reports more understandable for multiple stakeholders and increase transparency overall which eventually can result in higher ESG performance and as such also shareholder value. On the other hand, mandatory reporting regulations' critics describe mandatory regulations as effectless or stark and argue that companies which are forced to disclose information are faced with significant cost increases as well as changes in corporate processes.

Given the observed tensions among previous authors in this field on one side and the relevance of the CSRD given its upcoming introduction on the other side, we analyse the effects of mandatory reporting regulations on companies' ESG disclosures and investors' reactions to the provided information with our research, thus contributing to the literature concerning voluntary and mandatory ESG reporting.

Methods

We analyse the effects of mandatory reporting regulations on companies' ESG disclosures and investors' reactions in an experimental approach. Therefore, we conduct an in-person, one-shot experiment at the experimenTUM, i.e., TUM's laboratory for experimental research in economics, among 210 students. The experimental approach chosen allows us to isolate the effects of regulation from other influencing factors as voluntary ESG information disclosure has been increasing in the past and as such an increase of information over time does not necessarily prove an impact of previously introduced regulations. Moreover, our aim is to study the future impact of the upcoming CSRD and here the experimental approach allows for a forward-looking analysis based on students which potentially represent future investor behaviour. The experiment is inspired by the approach taken by Falk and Kosfeld (2006) who identified hidden costs of control when a principal controls an agent in his choice of performing an activity at a certain effort. In our experiment, two companies each choose a specific amount of ESG disclosure which is associated with certain costs. The investor then decides to invest in one of the two companies whereas the investor's success probability and pay-out depend on the amount of information disclosed, i.e., the more information a company discloses, the smaller the investor's failure risk but also pay-out. We thus adjust and extend the inspirational experiment in three main aspects, i.e., (1) we replace the linear cost function with an exponential cost function motivated by increasing proprietary costs with more disclosure and increasing complexity when disclosing high information levels, e.g., high complexity in Scope 3 greenhouse gas emission reporting vis-à-vis simple Scope 1 & 2 reporting, (2) we deploy a 1:2 principal-agent relationship resulting in a competitive situation among agent's thus modelling reality more closely and (3) we base the investor's pay-out on a risk-return relationship, thus factoring in investors' risk propensities. We conduct a total of four different scenarios of which one is the control scenario, i.e., companies can choose their level of disclosure freely, and three are treatment scenarios in which companies are exogenously required to disclose a certain minimum amount of information which differs across treatments (low, medium, high).

Results

Based on the described experiment, we were able to achieve several results. First, we can confirm our hypothesis that the amount of information disclosed by companies increases after introducing a regulatory minimum for disclosing ESG-related information as companies, independent of the scenario, have shown a tendency to disclose as little information as possible. Second, we can also confirm our hypothesis that the amount of capital invested by investors increases after introducing a regulatory minimum for disclosing ESG-related information resulting from a general risk aversion among investors and a higher willingness to invest when risk failure is comparably low. Both findings can be confirmed with significance. Third, we discovered a general tendency of companies' disclosed information amounts converging towards the respective minimum set by the regulator, yet we were not able to confirm this finding with significance. Fourth and last, we identified a tendency among investors to invest in companies disclosing at least half of the potential disclosure amount, yet disclosing beyond this average level was not valued by investors and much rather was seen as investment of too little return. We were not yet able to confirm this finding with significance but aim at studying further subjects to potentially confirm the finding.

Conclusions

We believe to contribute to the existing literature on voluntary and mandatory information disclosure with this paper and provide information relevant to companies, investors, and regulators. First, for companies it is valuable to understand how investors value an average level of information disclosure but no incremental information beyond this point. In today's business context many companies are facing competitive situations in which they want to differentiate themselves through ESG disclosure. As the effort of providing such incremental information exceeds the benefit in the market at a certain point, companies can optimise their resources as a result of this paper. Second, investors can discover how other investors react when facing similar situations to adjust their behaviour accordingly and third, our results stress the importance of regulatory authorities as we identified the regulation to impact both disclosed amount of information and invested capital positively. Moreover, it is interesting to understand as a regulator that the disclosure level needs to be chosen wisely to avoid an excessive cost burden on companies for providing additional information of little incremental value to investors.

References

- Aragón-Correa, J. A., Marcus, A. A., & Vogel, D. (2020). The Effects of Mandatory and Voluntary Regulatory Pressures on Firms' Environmental Strategies: A Review and Recommendations for Future Research. *Academy of Management Annals*, 14(1), 339–365.
- Chakraborty, P., & Chatterjee, C. (2017). Does environmental regulation indirectly induce upstream innovation? New evidence from India. *Research Policy*, 46(5), 939–955.
- Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1–23.
- Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: economic analysis and literature review. *Review of Accounting Studies*, 26(3), 1176–1248.
- Cordazzo, M., Bini, L., & Marzo, G. (2020). Does the EU Directive on non-financial information influence the value relevance of ESG disclosure? Italian evidence. *Business Strategy and the Environment*, 29(8), 3470–3483.
- Falk, A., & Kosfeld, M. (2006). The Hidden Costs of Control. *American Economic Review*, 96(5), 1611–1630.
- Henriques, I., & Sadorsky, P. (1999). The Relationship Between Environmental Commitment and Managerial Perceptions of Stakeholder Importance. *Academy of Management Journal*, 42(1), 87–99.
- Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43(9), 834–864.
- Kolk, A. (2003). Trends in sustainability reporting by the Fortune Global 250. *Business Strategy and the Environment*, 12(5), 279–291.
- Marshall, S., Brown, D., & Plumlee, M. (2009). The impact of voluntary environmental disclosure quality on firm value. *Academy of Management Proceedings*, 2009(1), 1–6.
- Ramchander, S., Schwebach, R. G., & Staking, K. I. (2012). The informational relevance of corporate social responsibility: evidence from DS400 index reconstitutions. *Strategic Management Journal*, 33(3), 303–314.
- Veltri, S., Luca, F. de, & Phan, H.-T.-P. (2020). Do investors value companies' mandatory nonfinancial risk disclosure? An empirical analysis of the Italian context after the EU Directive. *Business Strategy and the Environment*, 29(6), 2226–2237.
- Wagenhofer, A. (1990). Voluntary disclosure with a strategic opponent. *Journal of Accounting and Economics*, 12(4), 341–363.