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Exploration of Mandatory ESG Disclosure Regulations: Comparative Insights from the EU, UK, and China, and Their Implications for California's SB253 and SB261

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Abstract. In recent years, firms have been paying more attention to the issue of green development and sustainability, so that the concept of Environment, Social and Governance (ESG) is gradually central to firms' consideration, especially when involved in emissions. This article reviews the key regulatory models of ESG disclosure obligations for comparative analysis, namely through the lenses of the European Union's ("EU") Corporate Sustainability Reporting Directive (CSRD), United States Securities and Exchange Commission (SEC) proposed climate-related disclosure rules, and Task Force on Climate-related Financial Disclosure (TCFD) mandatory implementation in the United Kingdom. Moreover, this article does not seek to analyze what their interpretive effect would be when reading California's future SB253 and SB261. The findings in this study suggest that the CSRD of the EU is extensive and binding, with robust requirements of assurance, followed by the US, whose approach is still fragmented, considering no federal legislation has been enacted, making compliance almost voluntary. The U.K. approach is obligatory in nature but flexible by blending soft-law elements. The article concludes that legal traditions and regulatory philosophies play a significant role in the formation of ESG disclosure systems, and thereby harmonization will require balancing the extent to which laws are legally enforced with where they are best adapted within the markets, both of which state legislatures can learn from under these Acts.

Keywords: ESG, Coporate Governance, Sustainability, SB253, SB261

1. Introduction

ESG stands for Environmental, Social, and Governance and is a framework used to evaluate a company's sustainability and ethical impact. The path of ESG disclosure has moved from a voluntary Corporate Social Responsibility (CSR) to a mandatory regulatory directive. Supranational and state authorities have begun to recognize the potential of consistent, transparent disclosure in addressing concerns over the reliability and comparability of ESG reporting in reducing information asymmetry, enhancing transparency, and social conflict [1]. The Corporate Sustainability Reporting Directive (CSRD) from the European Union, the Climate-Related Financial Disclosures (TCFD)

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framework from the UK, and the China mandatory environment disclosure policy are prominent among the most ambitious regulatory measures.

Climate disclosure has also been proposed by the US SEC, with California going further by passing Senate Bills 253 and 261. SB253 requires full greenhouse gas emissions accounting from California's major corporations, which is unlike SB261's mandate of climate-related financial risk reporting. Empirical assessment of the impact of the new California laws is hampered by the fact that they have not gone into effect. A comparative legal approach may be a useful method of inquiry so that California can see in advance the opportunities and challenges that it could face by looking at the ESG disclosure systems of other jurisdictions.

This study explores the effect of different ESG disclosure formats on corporation governance and financial reporting as well as ESG controversies, characterized as an incident or scandal that demonstrates governance and ethical deficiencies. The research compares the EU's CSRD and the UK's TCFD and China reporting regulation requirements and examines the impact of these requirements on California's SB253 and SB261. The paper attempts to fill in a research gap and contributes to the literature by considering ESG controversies in the analysis of disclosure policy, which have not been well addressed in previous literature that has mainly focused on transparency and financial performance.

2. Literature review

The relationship between ESG disclosure and corporate governance has been the subject of much academic research. Eccles et al. argue that sustainability disclosure reinforces firms' orientation to the long-term and the way in which this is embedded in internal governance structures [2]. As demonstrated by Christensen, Hail, and Leuz, mandatory disclosure regimes can alleviate concern for greenwashers by imposing a uniform reporting standard, but the cost of compliance is nonetheless an important issue [3]. This seems ambiguous according to the literature, leading to both opposing viewpoints, which imply that disclosure improves transparency but has no effect on ESG performance. Incoming Krueger, Sautner, and Starks establish a link between climate disclosure and more institutional investor engagement, this is not universally found to result in, say, less emissions. In their study [4], they stress the intermediate role played by the governance structure, and in particular board size and independence, in the influence that ESG policies exert on firm behavior [5].

2.1. European Union: CSRD

The Corporate Sustainability Reporting Directive (CSRD) of the EU, which comes into force from 2023, is one of the most detailed of all the ESG disclosure regimes. For close to 50,000 companies, detailed environmental impact, social, and governance reports are now mandatory under the expanded non-financial reporting requirements in the directive (European Commission, 2023). Aureli et al. argue that the CSRD plays a role in the enhancement of comparability of ESG information [6]. Moreover, doing so increases the cost of complying, which has the highest impact on smaller organizations. Enforcement too faces a challenge: the CSRD enforces homogeneous reporting under the European Sustainability Reporting Standards (ESRS), but quality control is not uniform among member states [7].

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2.2. United Kingdom: TCFD

The UK has set a precedent by being the first G20 country to mandate TCFD-aligned reporting for listed companies from 2022. The framework highlights the significance of climate-related financial risks that firms must disclose their governance, strategy and risk management, metrics, and targets, as reported by HM Treasury. Evidence and also, Oesch and Reinhart's empirical studies indicate that TCFD disclosures have positively enhanced the awareness of the financial sector regarding climate risk [8]. Studies suggest that firms tend to adopt a compliance approach and focus on boilerplate language instead of substantive changes [9]. The use of scenario analysis in non-financial areas is the weak link of TCFD in advocating emission reduction.

2.3. China: mandatory environmental disclosure

In 2017, China implemented mandatory environmental reporting by listed enterprises, which would cover issues such as the level of emissions of pollution and compliance with environmental regulations. This study shows that disclosure has led to more environmental information and more informed investors, and that the practice of selective disclosure still exists [10].

2.4. SB253/261's pending

There is no shortage of discussion about the SEC's 2022 proposal on climate disclosure. Proponents would argue that this would harmonize the U.S., consistent with other countries, despite potential legal disputes and regulatory liabilities. Meanwhile, critics would focus on the legal disputes and regulatory responsibilities [11]. California's SB253 and SB261 go beyond the guidance of the SEC by requiring Scope 1–3 emissions disclosure (SB253) and climate risk reporting (SB261) for companies with revenues in excess of $1 billion. No single academic analysis of these laws is available yet, but preliminary research shows that expected benefits might include decreased information asymmetry and more closely aligned investor expectations [3].

2.5. ESG-related controversies, as identified in complaints literature

A prominent gap exists in the literature on ESG controversies. While ESG scores have been researched widely, the controversies around them, which are considered by databases including Refinitiv or MSCI, have not been in the spotlight as much. Dyck, Lins, [12] highlight controversies as a central signal of governance failures and damage to reputation. Very few studies directly link ESG conflicts to disclosure laws. The goal is then to bridge that gap by subjecting debates to the comparative analysis within legal studies.

3. Comparative analysis

This study takes a transnational legal perspective and combines black letter disclosure laws with empirical findings from other studies. The approach has three key elements. The scrutiny of foundational legal texts includes the EU CSRD, UK TCFD-aligned directives, China's environmental disclosure regulations, the SEC climate disclosure initiative, and California SB253 and SB261. The purpose of the study is to compare and contrast industry coverage, metric requirements, enforcement approach, and penalties associated with non-compliance across different countries. Empirical research integration: Review of previous academic works that have explored ESG ratings, controversies, and governance consequences in multiple markets. The provision allows

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one to assess the impact of different disclosure regimes on corporate conduct. The comparative methodology is considered particularly appropriate given the newness of SB253/261 and the absence of any data to describe its implementation.

3.1. EU CSRD

The CSRD significantly strengthens the transparency and comparability of ESG information. The implementation of double materiality requires firms to disclose both positive and negative impacts, which reduces selective reporting [5]. Differences in enforcement between member states result in differing quality standards. There is scant data on controversies, but the early evidence suggests a lack of immediate impact in reducing ESG-related scandals, suggesting that disclosure alone may not be sufficient to change corporate conduct.

3.2. UK TCFD

The UK's TCFD drive has catalyzed climate-related reporting requirements, which have broader coverage in the financial sector and with a particular emphasis on banks and insurers. Disclosures are generic in nature, and often fail to include quantitative scenario analysis [9]. The findings suggest an enhanced awareness of climate risks, but there have been modest changes in governance. Ongoing disputes over greenwashing endure.

3.3. China's regime

The implementation of the mandatory environmental disclosure in China has increased data availability, though it is affected by selective reporting and insufficient enforcement [13]. The importance of the effectiveness of enforcement and independent validation is emphasized.

3.4. SEC and California SB253/261

The SEC's proposal focuses on the materiality of climate risk, more consistent with the TCFD than the CSRD. SB253/261 in California extends the focus, requiring reporting of both Scope 1–3 emissions and of climate risk governance for all large companies. SB253 is even more stringent on the members of the international community, while SB261 widens the circle from the standards on the verge of the risk assessment. Key to California's success was the development of credible monitoring, and customized sectoral advice, learning from the EU, UK, and from China.

Mandatory ESG disclosure laws provide increased transparency, but have limited effectiveness for reducing ESG controversies. The results suggest that transparency is a necessary but insufficient condition for reform. This paper contributes to the academic debate by presenting ESG litigation as a crucial proxy for assessing the effectiveness of disclosure regulation. The contribution is that it develops theoretical models that explain the discrepancies between transparency and the progress of actual governance, and hence links disclosure to corporate accountability. The success of California SB253 rests in the verification and checking of the data to prevent gaming of carbon accounting.

To avoid generic reporting with the SB261 in California, sector-specific guidelines and scenario analysis must be adopted, but it is clear that the TSCFCD format can be followed using cues from other jurisdictions, too.

One of the major reasons is that international comparability underscores market discipline, effective enforcement, transparency, and other key components for good practice in disclosure.

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4. Conclusion

This paper closely surveys the ESG disclosure frameworks in the UK, EU, and China, as well as their impact on corporate governance and ESG-related disputes. Lessons for California's SB253 and SB261 can be found within its pages.

Results show that mandatory design leads to openness and awareness on the part of investors, but this certainly does not mean ESG concerns disappear without a trace. Translation: To make substantial strides in governance, enforcement, verification, and tailored sectoral guidance are absolutely necessary. These governance improvements are also a function of how well the market enforcers and verification components serve companies.

This investigation unites ESG disputes with the evaluation of disclosure laws, allowing policymakers to assess the impact of ESG rules better—a tool that also needs further study. The success of SB253 and SB261 in California depends on maintaining ambitious and consolidated disclosure regulations while intensifying enforcement and monitoring.

References

[1] Eccles, R. G., & Klimenko, S. (2019). The investor revolution: Shareholders lead as sustainability raises stakes. Harvard Business Review, 97(3), 106–116.
[2] Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835–2857. https: //doi.org/10.1287/mnsc.2014.1984
[3] 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. https: //doi.org/10.1007/s11142-021-09639-5
[4] Liang, H., & Renneboog, L. (2017). On the foundations of corporate social responsibility. Journal of Finance, 72(2), 853–910. https: //doi.org/10.1111/jofi.12487
[5] Krueger, P., Sautner, Z., & Starks, L. T. (2020). The importance of climate risks for institutional investors. Review of Financial Studies, 33(3), 1067–1111. https: //doi.org/10.1093/rfs/hhz137
[6] Aureli, S., Magnaghi, E., & Salvatori, F. (2020). The role of EU Directive 2014/95 in enhancing non-financial disclosure: Evidence from Italy. Accounting in Europe, 17(1), 1–26. https: //doi.org/10.1080/17449480.2020.1716980
[7] La Torre, M., Sabelfeld, S., Blomkvist, M., & Dumay, J. (2020). Rebuilding trust: Sustainability and non-financial reporting and the European Union regulation. Meditari Accountancy Research, 28(5), 701–725. https: //doi.org/10.1108/MEDAR-06-2020-0913
[8] Oesch, D., & Reinhart, M. (2023). Climate risk disclosure and firm performance: Evidence from TCFD adoption. European Financial Management, 29(2), 345–370. https: //doi.org/10.1111/eufm.12355
[9] Abhayawansa, S., & Adams, C. A. (2021). Towards a conceptual framework for non-financial reporting inclusive of non-financial risks. Journal of Business Ethics, 171(2), 287–302. https: //doi.org/10.1007/s10551-020-04429-w
[10] Jiang, G., & Kim, K. A. (2020). Corporate governance, ESG, and stock returns in China. Pacific-Basin Finance Journal, 62, 101366. https: //doi.org/10.1016/j.pacfin.2020.101366
[11] Frankel, R., Sun, Y., & Zhou, X. (2022). Climate risk disclosure and the SEC's proposed rules. Accounting Horizons, 36(4), 91–104. https: //doi.org/10.2308/acch-19-019
[12] Dyck, A., Lins, K. V., Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? International evidence. Journal of Financial Economics, 131(3), 693–714. https: //doi.org/10.1016/j.jfineco.2018.08.013
[13] Chen, L., Hung, M., & Wang, Y. (2018). The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. Journal of Accounting and Economics, 65(1), 169–190. https: //doi.org/10.1016/j.jacceco.2017.11.009