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Executive compensation and sustainable business practices: The moderating role of sustainability-based compensation policy

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Synopsis

A key approach to achieving global greenhouse gas (GHGs) emission targets is to incentivise corporate executives to adopt and implement emission reduction initiatives. To gain more insight into this method of aligning executive sustainability decisions to executive compensation, we analyse 262 non-financial listed firms in the United Kingdom from 2009 to 2018. We find that the various components of executive compensation have a positive impact on all the executive sustainable decisions, captured by sustainable business practices measures (SBPs). We also document that the metric 'pay-for-sustainability sensitivity' (PSS) is stronger in firms with sustainability-based compensation policies. In addition, we detect that both the PSS and the moderating effect of sustainability-based compensation policy on the PSS, are higher for the symbolic constructs of SBPs than the actual measures of SBPs.

Introduction and Background

Global attempts that seek to minimise climate change through the design and adoption of sustainable corporate strategies have deepened over the past three decades. For instance, policymakers and various governments are increasingly exhibiting greater concern about the risks of a severe climate crisis on the environment. In responding to this climatic threat, the UN has

a well-defined sustainable development policy centred on 17 broad "Sustainable Development Goals" (SDGs), with 2030 set as the time limit for achieving them. To reach the SDGs and global GHGs emission reduction targets, there are calls for large firms to incentivise their executives to adopt GHGs emission reduction initiatives. However, it is unclear whether sustainability-based compensation strategies, which are progressively being adopted by large firms, lead to an actual reduction in GHG emissions. This is regrettable because understanding these key relationships can assist the board and policymakers to design sustainable compensation strategies that have a meaningful impact on GHGs emissions. Hence, the overall objective of our paper is to examine the effect of CEO pay and executive compensation on SBPs and explore the probable moderating effect of sustainability-based compensation policy on the PSS. We explore these relationships employing both substantive and symbolic constructs of SBPs.

Issues and Questions Considered

A small, but steadily increasing number of studies have endeavoured to investigate the association between executive compensation and sustainability initiatives (see for example Cordova et al., 2021; Haque & Ntim, 2020). However, none of these studies examined this

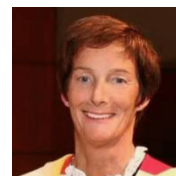
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relationship in an all-inclusive and integrated manner. For example, the sustainability measures in prior studies are mainly based on either symbolic constructs (environmental or social disclosures), or substantive measures (GHGs or carbon dioxide emission performance) of sustainability performance (e.g., Okafor & Ujah, 2020; Maas, 2018; Haque, 2017; Velte, 2016). Hence, one of our main objectives was to conduct a study based on both symbolic and substantive measures of sustainable business performance in a single empirical framework. Again, to broaden the analysis, we employ the various components of CEO pay and executive compensation.

Specifically, and in order to extend the research on the PSS, we address three core research questions. Firstly, we examine whether CEO pay, and executive compensation impacts SBPs? Secondly, we test whether the presence of a sustainability-based compensation policy can moderate the association between executive compensation and SBPs. Finally, building on what has been established in the extant literature concerning the tendency for firms to disclose superior SBPs performance (Haque & Ntim, 2020), we seek to ascertain whether the moderating impact of sustainability-based compensation policy on the PSS improves in the symbolic construct of SBPs rather than the actual measures of SBPs.

Methodology

The final sample is based on an unbalanced panel dataset of 2,579 firm-year observations, covering a 10-year period (2009-2018). To help conduct our analysis we employ two main investigations. Firstly, we examine two firm symbolic SBPs constructs: process-oriented carbon reduction initiatives and sustainability-based compensation. Secondly, we employ four firm SBPs substantive measures (the actual Environment, Social and Governance performance, GHGs emission performance, carbon dioxide emission performance and environmental performance). Further, we define CEO pay using five different measures; benefits, short-term compensation, long-term compensation, total remuneration excluding pension and total remuneration including pension. Similarly, we define executive compensation using similar measures as follows: total benefits of all executives including the CEO, short-term executive compensation, long-term executive compensation, total executive compensation excluding pension and total executive compensation including pension.

Following a well-established line of research (see for example Nguyen et al., 2021; Elmagrhi

et al., 2019), we employ ordinary least squares regression models to examine our hypotheses. We conduct further analyses to ascertain the robustness of our results. Specifically, we estimate a dynamic two-step system of generalized method of moments (GMM) as proposed by Blundell and Bond (1998), and we apply lagged effect models.

Outcomes and Findings

Overall, the results show that the various components of both CEO pay and executive compensation have positive impacts on both symbolic and actual measures of SBPs. The results also reveal that the presence of sustainability targets in CEO and executive compensation packages positively moderates the CEO pay-for-sustainability sensitivity and executive compensation-for-sustainability sensitivity metrics. These findings suggest that firms can design and employ sustainability targets in compensation packages as instruments to incentivise corporate executives to pursue sustainability initiatives. Finally, our results are in line with legitimisation aspect of neo-institutional theory that holds that firms seem to symbolically rely on superior process-oriented GHGs disclosures as means of enhancing their corporate legitimacy and investors' perceptions. Manifestly, this might not lead to an actual reduction in GHGs emissions, as it is the implementation of actual (rather than symbolic) GHGs emission reduction initiatives that might lead to substantial reduction in emissions.

Our study shows the crucial role executive compensation can play in driving corporate executives to engage in SBPs. Firstly, we recommend that firms ought to incorporate SBPs-related targets into executive compensation contracts to ensure that SBPs are sufficiently integrated into the core business of companies. Secondly, rating agencies and analysts should shift their focus from their traditional approach of relying on symbolic GHGs emission indicators. Instead, rating firms ought to measure actual GHGs emission reduction performance and advise investors and the general public accordingly, which will result in well-informed investment decisions. Finally, our study suggests that policymakers should demand independent external assurance of the verifiability of sustainability reports to enhance the quality of SBPs reporting. Future studies could apply this empirical framework to other countries that have also ratified the 'Kyoto Protocol' in a single country or cross-country analysis.

The underlying paper was published in *Business Strategy and the Environment*, and a full copy can be obtained at:

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