Sustainability and Executive Compensation

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Abstract

Over the last few decades, executive pay has undergone several major reinterpretations, which have affected both its design and regulation. Our chapter provides an overview of the trajectory of executive pay, including the recent trend toward integration of sustainability and ESG targets in compensation packages. Our chapter also provides empirical evidence as to the prevalence of ESG-linked executive pay in public listed companies. Analysing a sample of 8.649 publicly traded firms covering 58 countries in the period 2002-2021, we show that a growing number of listed firms include drivers involving sustainable performance in their executive remuneration packages. However, we identify notable differences associated with sector and country characteristics in this regard. For example, we find that, in countries with better government features, firms are more likely to adopt ESG-linked compensation. Overall, our empirical analysis presents a mixed picture. Some of our findings could be consistent with the idea that ESG-linked compensation exacerbates the agency problem of executive pay. We cannot, however, rule out the possibility that such compensation provides a powerful incentive towards more sustainable corporate practices in the future.

Keywords: executive compensation, corporate social responsibility, compensation, corporate governance, ESG

JEL Classifications: D22, G30, G34, J33, K22, K33, K40, M12, M14, M52, 016

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1. INTRODUCTION

The history of corporate law has been characterised as a 'clash between the different visions of corporatism',[1] exemplifying the tension between a public and private image of the corporation.[2] Corporate law and governance have shifted between these two ends of the spectrum across time and jurisdictions.

This tension also underlies developments in executive compensation. In recent decades, executive pay has undergone several major reinterpretations, which have affected both its design and regulation. Corporate theory, together with 'problem framing',[3] have played an important role in these reinterpretations.[4]

Developments in executive pay from the early 1990s onwards were firmly based on a private theory of the corporation. According to this theory, the central problem in business law was that of financial underperformance by corporations. In recent times, a more complex picture of the corporation has emerged — one in which the corporation straddles both private and public law.[5] A series of scandals and crises highlighted a second major problem in corporate law, namely the danger that corporate conduct can create negative externalities and harm to society.[6]

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1 Bratton & Wachter, 2008, 124.

2 See generally Allen, 1992.

3 'Problem framing' is a key feature of transnational legal ordering. See generally Bowley & Hill, 2022a.

4 See generally *id*.

5 Hill, 2021.

6 *Id*.

Recognition of this second problem has prompted an increased focus on issues relating to sustainability and ESG, including in the area of executive compensation.[7]

This chapter provides a broad overview of developments relating to the design and regulation of executive pay over the last few decades, including the recent rise of integration of sustainability and ESG targets in executive compensation packages. The chapter examines some of the reasons for this development and provides empirical evidence relating to prevalence of this trend in public listed companies today.

2. A SHORT HISTORY OF EXECUTIVE COMPENSATION: THEN AND NOW

a. Corporate Theory and Executive Compensation Design: From Corporate Governance Problem to Corporate Governance Solution

'Show me the incentive and I will show you the outcome.'

Charlie Munger, Berkshire Hathaway[8]

Just over 30 years ago, Jensen and Murphy adopted a law and economics lens to redirect debate concerning executive compensation in their watershed article, 'CEO Incentives – It's Not How Much You Pay, But How'.[9] The article transformed executive pay, which had traditionally been treated as a corporate law problem related to breach of fiduciary duty,[10] into a corporate governance solution.

The article served as a prelude to the era of performance-based compensation,[11] which was designed to address agency problems involving corporate underperformance.[12] According to this model, performance-based pay operated as a self-executing mechanism to align managerial

7 *Id*.

8 See Lean CX, 2020.

9 Jensen & Murphy, 1990.

10 Yablon, 1999, 279–80.

11 *Id*.

12 Jensen & Murphy, 1990.

interests with those of the company's shareholders.[13] Performance-based pay also functioned as a legitimising device, offering the promise of enhanced pay for superior corporate performance and reduced pay for sub-standard performance.[14] Under this 'just deserts' approach,[15] the quantum of pay was irrelevant, provided that it enhanced shareholder wealth.[16]

The 1990s, which has been described as the 'decade of corporate governance',[17] was also a decade of soaring executive pay in United States, particularly for the largest firms.[18] The widespread adoption of performance-based pay, coupled with huge option grants, contributed to this trend.[19] So, too, did a notable reform during this period, §162(m) of the US tax code.[20] Although this legislative provision was conceived as a control on excessive compensation,[21] by the time it became law in the mid-1990s, a subtle wording change subverted that original policy goal and led to a disproportionately large component of variable pay compared to fixed pay in US executive compensation packages,[22] thereby accelerating the trend toward dramatically higher pay.[23]

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13 See Ellis, 1998, 402.

14 Jensen & Murphy, 1990; Frydman & Saks, 2010.

15 See Hill, 2012a.

16 See Loewenstein, 1996, 206–7; Ferrarini, Moloney & Ungureanu, 2010, 80.

17 Conoley, 1999, quoted in Cheffins, 2015, 733.

18 See, eg, Bebchuk & Grinstein, 2005; Conyon et al., 2013, Figure 1.1, 18; Edmans, Gabaix & Jenter, 2017, 388-95.

19 See, eg, Yablon, 1999, 293–4; Perry & Zenner, 2000, 145; Conyon et al., 2013, 18. See generally Edmans, Gabaix & Jenter, 2017, 398–404 (discussing changes in the structure of executive pay, including the escalation (in the 1980s–1990s) and the decline (from 2000 on) of outsized option grants in favour of restricted stock grants). However, outsized option grants are by no means a thing of the past. In 2018, Tesla CEO, Elon Musk, received a performance-based stock option grant potentially worth US$55 billion. See Chase & The Associated Press, 2022.

20 Internal Revenue Code (I.R.C.) of 1995 § 162(m).

21 The original iteration of the provision would have disallowed corporate tax deductions for any compensation exceeding US$1 million on the basis that such pay was 'unreasonable'. See generally Conyon et al., 2013, 24.

22 See, eg, Miske, 2004; Conway, 2008, 396; Murphy & Jensen, 2018.

23 See Loewenstein, 1996, 219–20; Murphy & Jensen, 2018. See also Winter, 2012 (arguing, from a behavioural economics perspective, that performance-based pay is inherently flawed and exacerbates, rather than alleviates, agency problems).

It has been said that Europe was 'quick to catch up' with performance-based pay, and compensation packages of executive directors of EU listed companies soon followed the US trend of adopting performance targets, in combination with large cash bonuses and stock option awards.[24] Yet, in spite of many convergent trends at an international level,[25] executive compensation is an area where corporate culture plays an important role.[26] Cultural differences are evident in relation to matters, such as design of executive contracts,[27] tolerance for high levels of pay and income inequality[28] and attitudes to disclosure of compensation.[29] Pay levels for CEOs in the United States, for example, have traditionally been far higher than in the United Kingdom and Europe,[30] although the gap between US and UK executive pay narrowed in recent decades.[31]

Capital market structure is also relevant in relation to executive pay. The capital market structure in many EU listed companies is quite different to that of US public corporations. Unlike the dispersed ownership system, with high levels of institutional investor ownership, that is common in the United States, many companies in continental Europe exhibit concentrated ownership structures, due to family control and other forms of blockholding.[32] These factors potentially alter the nature of the agency problems[33] that US-style performance-based pay was designed to solve.[34] For example, in a dispersed capital market context, the

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24 Winter, 2012, 199.

25 Ferrarini & Moloney, 2005.

26 Levitt, 2005.

27 See, eg, Hill, Masulis & Thomas, 2011.

28 Conyon & Murphy, 2000, F646–7.

29 Ferrarini & Moloney, 2005.

30 See, eg, Thomas, 2004; BIS, 2010, 27; Ferrarini, Moloney & Ungureanu, 2010, 79; Edmans, Gabaix & Jenter, 2017, 421–4.

31 BIS, 2010, 25–7.

32 See, eg. Faccio & Lang, 2002, Barontini & Caprio, 2006, OECD, 2021, 24–6.

33 See Cheng, Lin & Wei, 2015 (discussing the complex agency problems that can arise in the context of concentrated ownership of Chinese family firms).

34 Ferrarini & Moloney, 2005, 306. *Cf* Ferrarini, Moloney & Ungureanu, 2010, 78, 82–3 (noting that performance-based pay structures can still perform a role in aligning managerial interests with those of minority shareholders in blockholding companies). In spite of the focus of corporate governance literature, including that relating to executive pay, on the United States and the United Kingdom, in fact, ownership concentration is at a company level is increasing around the world. OECD, 2021, 12.

central problem regarding executive pay is a principal-agent conflict, whereas in jurisdictions, such as continental Europe, where concentrated ownership is prevalent, the main problem is one of 'principal-principal conflicts' between majority and minority shareholders.[35] Although concentrated ownership can mitigate some free-riding and monitoring problems relating to executive pay, it can also generate different problems, such as appropriation of private benefits and tunnelling.[36]

Since the introduction of performance-based pay, academic debate has raged as to whether this form of compensation was efficient and determined at arm's length by disinterested directors (the optimal contracting theory) or skewed due to a power imbalance between managers and shareholders (the managerial power model).[37]

b. Executive Compensation: From Enron to the Global Financial Crisis

'The levels of compensation that we are talking about here would certainly seem to be a powerful incentive for anyone to do anything.'

Stephen Meagher[38]

A string of international corporate scandals and collapses in the early 2000s increased debate about the design of performance-based pay. Scandals, such as Enron and WorldCom in the United States, and Parmalat, Vivendi and Royal Ahold in Europe, highlighted the fact that performance-based pay could create perverse incentives to engage in misconduct, including earnings management.[39]

In spite of the existence of similar structural defects in the executive pay packages of the relevant companies, the regulatory responses of jurisdictions differed significantly, largely due

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35 See Barontini & Bozzi, 2011.

36 Sánchez-Marín et al., 2022, 2820.

37 See generally Bebchuk & Grinstein, 2005; Core, Guay & Thomas, 2005; Thomas & Wells, 2011; Hill & Thomas, 2012, 1–3; Edmans, Gabaix & Jenter, 2017.

38 See Eichenwald, 2002, quoting comments by Stephen Meagher, a former federal white-collar crime prosecutor, in relation to executive pay at Enron.

39 See Gordon, 2002; Coffee, 2004; Ferrarini, Moloney & Ungureanu, 2009.

to variances in problem framing. For US legislators, the primary explanation for the collapse of Enron and WorldCom was lack of auditor independence, rather than misaligned incentives in executive pay.[40] The Sarbanes-Oxley Act of 2002 ('Sarbanes-Oxley Act'), accordingly, paid minimal attention to the regulation of executive compensation,[41] or to strengthening shareholder rights in relation to executive compensation.[42]

The post-scandal regulatory responses to executive pay and shareholder rights in the United Kingdom and continental Europe were more robust than in the United States.[43] In 2002, the United Kingdom became the first jurisdiction to require an annual non-binding shareholder vote on executive pay ('Say on Pay'),[44] in response to public outrage about so-called 'fat cats'[45] and government concern about 'rewards for failure'.[46] The European Commission ('EC'), as part of the 2003 Company Law ActionPlan, adopted two important Recommendations — the 2004 Recommendation on Directors' Remuneration[47] and the 2005 Recommendation on the Role of Non-executive Directors[48] — which have been described as 'the heart of the EU's remuneration regime'.[49] The 2004 Recommendation, for example, contained enhanced disclosure rules for remuneration policy and for individual directors' remuneration packages, as well as providing shareholders with a (binding or non-binding) vote on remuneration policy.[50] Unlike the approach taken in the US Sarbanes-Oxley Act, the UK and EU reforms

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40 See Coffee, 2004.

41 See Sarbanes-Oxley Act § 304 and § 402.

42 See Chandler & Strine, 2003, 999 (describing the failure to confer stronger rights on shareholders as potentially the 'forgotten element' of the Sarbanes-Oxley Act).

43 See generally Ferrarini, Moloney & Ungureanu, 2009.

44 Directors' Remuneration Report Regulations, 2002 (now found in Companies Act 2006, s. 439). See generally Ferri & Maber, 2013; Gordon, 2009.

45 See, eg, Jackson, 1998; *The Economist*, 2003.

46 See, eg, Trade and Industry Committee, 2002-03.

47 Official Journal of the European Union, 2004.

48 Official Journal of the European Union, 2005.

49 Ferrarini, Moloney & Ungureanu, 2009, 26. See generally Ferrarini, Moloney & Ungureanu, 2010.

50 Ferrarini, Moloney & Ungureanu, 2009, 26.

sought to align shareholder and management interests by elevating the role of shareholders and strengthening their rights in the context of executive pay.[51]

Executive pay again became a regulatory flashpoint in the 2007–2009 global financial crisis (‘GFC’). Regulatory responses to the crisis reflected the view that flawed executive compensation structures played a direct role in the crisis by creating perverse incentives that encouraged short-termism and excessive risk-taking,[52] although some commentators disputed this assessment.[53]

At a supranational level, transnational networks, such as the Group of Twenty (G20), stressed the need for greater global coordination to monitor systemic financial risks[54] and implementation of financial market reforms, including those relating to executive compensation.[55] The Financial Stability Board (‘FSB’) sought to achieve cross-border regulatory harmonisation by formulating *Principles for Sound Compensation Practices*[56] to provide a blueprint for national prudential standards relating to remuneration in financial institutions.

In the United States, Timothy Geithner, former US Secretary of the Treasury, stated that perverse incentives for short-term gain in compensation contracts had ‘overwhelmed the checks and balances meant to mitigate against the risk of excess leverage’.[57] Although US reforms were originally restricted to companies receiving government bail-out funding, they subsequently expanded to cover executive pay and shareholder empowerment more generally.[58] The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010

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51 *Id*. at 28.

52 See, eg, Crotty, 2009, 565; Avgouleas, 2009, 42–5; Bebchuk & Spamann, 2010, 255–68.

53 See, eg, Fahlenbrach & Stulz, 2011; Ferrarini & Ungureanu, 2011.

54 See Hill, 2012b, 225-6.

55 *Id*. at 263-4.

56 See FSF, 2009. The FSB was originally named the Financial Stability Forum (FSF).

57 See Braithwaite, 2009.

58 See generally Hill, 2012a, 224–6.

('Dodd-Frank Act')[59] adopted a range of statutory provisions concerning executive pay, including the first US 'Say on Pay' requirement;[60] disclosure re pay disparity within firms[61] and compensation claw-back policies.[62]

Developments in the United Kingdom and Europe during this period emphasised the connection between executive pay and excessive financial risk,[63] as well as the potential threat this risk posed to economic stability. The influential 2009 UK Walker Review[64] explicitly linked effective risk management with the policy goals of societal benefit and sustainability, stating:

> [i]f banks are to be able to contribute to the nation's economic recovery and wellbeing, it is of critical importance that remuneration practices be reconstructed to provide incentives in support of sustainable performance.[65]

UK and European post-crisis executive compensation reforms focused strongly on the issue of risk management.[66] In 2010, for example, the UK Financial Services Authority ('FSA') published revisions to its remuneration code ('Revised Remuneration Code').[67] The revisions were designed to take account of developments, such as the Walker Review, and the need to comply with the European Parliament's Capital Requirements Directive ('CRD III')[68] on

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59 Dodd-Frank Act.

60 Dodd-Frank Act § 951.

61 Dodd-Frank Act § 953(b).

62 Dodd-Frank Act § 954.

63 See, eg, FSA, 2009, 79–81.

64 Walker, 2009, Chapter 7.

65 *Id*. at [7.1].

66 See generally Ferrarini & Ungureanu, 2010, 207–10.

67 FSA, 2010.

68 See Official Journal of the European Union ('CRDIII'), 2010. CRDIII implemented the FSB's *Principles for Sound Compensation Practices*. *Id*. at (1).

compensation structure and performance measures,[69] as well as guidelines of the Committee of European Banking Supervisors ('CEBS').[70] The Revised Remuneration Code stated that its key objectives were to promote market confidence and financial stability by reducing incentives for excessive risk-taking[71] and by ensuring consistency between compensation policies/practices and effective risk-management.[72] The EU reforms were considerably more detailed and rule-based than those adopted in the United States.[73]

The GFC highlighted the 'interconnectedness' of markets and the potential for international regulatory coordination to address concerns about negative externalities and moral hazard, particularly in the banking sector.[74] The crisis led to a new risk-based approach to the design of performance incentives in executive pay and increased emphasis on long-term value creation and sustainability.[75] Regulatory responses to the crisis were also underpinned by a re-evaluation of the concept of interest alignment, and the need to align the interests of management not merely with those of shareholders, but also with the interests of society as a whole.[76]

These developments provided the basis for further refinement of incentives in the ESG era.

c. Executive Compensation in the ESG Era

i. Introduction

'Virtue itself turns vice, being misapplied'.

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69 See generally Cleary Gottlieb, 2010. CRDIII was introduced by Directive 2010/76/EU (Official Journal of the European Union ('CRDIII')) and was subsequently repealed and replaced by Directive 2013/36/EU (Official Journal of the European Union, 2013). See EBA, 2016, 7; EBA, 2021, 5-6.

70 CEBS, 2010. See also Ferrarini & Ungureanu, 2010, 198, 215–16.

71 See FSA, 2010, [1.16].

72 *Id*. at [1.17].

73 Cleary Gottlieb, 2010, 7.

74 See, eg, Ferrarini & Ungureanu, 2010, 198, 214–6.

75 *Id*. at 202; Hill, 2012a, 231–2.

76 Hill, 2012a, 233–4.

William Shakespeare[77]

The US and European scandals at the turn of the twenty-first century, together with the global financial crisis, demonstrated that 'major financial crises have a habit of changing the executive pay debate'.[78] More recent examples, such as the Wells Fargo fraudulent accounts scandal[79] and the Volkswagen emissions scandal,[80] reinforced concerns that flawed remuneration practices can create perverse incentives for corporate misconduct and negative externalities.[81] They also showed that an exclusive focus on financial success can 'dull the senses' of institutions, boards of directors and managers to other kinds of risk.[82]

Today, the world is facing a new, and unprecedented, set of risks concerning the environment, particularly in relation to climate change. These risks are now treated as key financial risks for corporations.[83] BlackRock, for example, has estimated that climate change poses a US$ 8.2 billion risk to its portfolio.[84] Controversial proposed corporate climate risk disclosure rules by the US Securities and Exchange Commission are premised on the view that enhanced disclosure is justified precisely because climate risk is a financial risk.[85]

Heightened recognition of these new risks has led to another U-turn in the design and regulation of executive pay, with growing integration of sustainability and ESG targets in compensation packages. Executive pay is again being presented as a corporate governance solution, but to a different set of problems. The new approach focuses attention on corporate commitment to

77 *Romeo and Juliet*, Act 2, Scene 3.

78 Ferrarini, Moloney & Ungureanu, 2010, 74.

79 See, eg, Wattles et al., 2018.

80 See generally Armour, 2016a; Armour, 2016b.

81 Some scholarship has suggested that stock-based executive remuneration can create systematic perverse incentives for senior managers to underinvest in compliance programs. See Armour, Gordon & Min, 2020.

82 See APRA, 2018, 3.

83 See, eg, Summerhayes, 2017; Price, 2018.

84 Jaeger, 2021.

85 See SEC, 2022 (stating that 'investors representing literally tens of trillions of dollars support climate-related disclosures because they recognize that climate risks can pose significant financial risks to companies'). *Cf* Pierce, 2022.

ESG values.[86] Developments concerning integration of sustainability and ESG considerations into executive pay focus attention, not merely on profit maximisation, but on broader questions about *how* profits were achieved and whether profits were made by creating negative externalities and causing societal harm.

Executive compensation is arguably entering a new era of 'pay for sustainable performance'. A key issue is what are the main drivers of this development?

ii. What is Driving the Shift to 'Pay for Sustainable Performance'?

'Sustainability is here to stay, or we may not be.'

Niall FitzGerald,
Unilever[87]

There are several drivers of the movement toward pay for sustainable performance, which involves recognition that performance can no longer be measured 'in purely financial terms'[88] and that ESG factors are an integral part of a company's long-term value.[89] Firms adopt ESG-linked pay for various reasons, some of which are market based and some of which are due to regulatory requirements.[90] These pressures form part of a complex 'global stewardship ecosystem'[91] that has, in recent years, helped ESG go 'mainstream'.[92]

International organisations associated with the United Nations ('UN') have played a particularly important norm-creating role in this area. For example, the UN-sponsored Global

[86] See, however, Maas, 2018, 574 (stating that the concept of corporate social performance has been present in accounting and management literature for nearly half a century).

[87] Changing the Present.

[88] See HBR Editors, 2014. See also HBR Editors, 2019 (noting that that its ranking since 2015 of the best-performing CEOs in the world has related, not only to financial performance, but also to ESG ratings).

[89] See, eg, Edmans, 2022.

[90] See, eg, PricewaterhouseCoopers, London Business School & Leadership Institute, 2022, 3–6.

[91] See Bowley & Hill, 2022b.

[92] See Edmans, 2022, 2 (noting 'ESG's evolution from a niche subfield into a mainstream practice').

Compact,[93] which describes itself as 'the world's largest corporate sustainability initiative',[94] has undertaken various important projects involving sustainability, ESG and responsible investment.[95] Another prominent UN-affiliated organisation in this area is the Principles for Responsible Investment ('PRI'),[96] whose current strategic plan seeks, *inter alia*, to 'champion climate action'.[97] In 2016, the PRI released an influential paper, specifically tying ESG goals to executive pay.[98] The paper, which described the integration of ESG issues and executive pay as being 'in its infancy',[99] called on investors to play a larger role in achieving a 'holistic approach towards sustainable performance'[100] in relation to executive pay. The International Corporate Governance Network ('ICGN') has also highlighted the need for such an approach in the wake of the Covid-19 health crisis.[101]

Sustainable investment has increased dramatically in recent years.[102] So too has institutional investor engagement with companies on ESG matters,[103] and this now constitutes one of the most potent pressure points relating to ESG and sustainable business practices.[104] This

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93 In 1999, then-Secretary General, Kofi Annan, proposed that the UN and business leaders establish a 'global compact of shared values and principles'. See UN, 1999. The Global Compact was officially launched in 2000. See UN, 2000.

94 UN Global Compact.

95 Indeed, it appears that the Global Compact was the first to use the 'environmental, social and governance' term and its 'ESG' acronym. See Pargendler, 2021, 1796; The Global Compact, 2004. The 'Who Cares Wins' scheme was a joint initiative of the UN Global Compact and the Swiss Federal Department of Foreign Affairs.

96 The PRI was launched by the Global Compact in 2006. See PRI, *About the PRI*. The PRI is an investor initiative, which operates in partnership with the United Nations Environment Programme Finance Initiative ('UNEP Finance Initiative') and the UN Global Compact. See generally Bowley & Hill, 2022b.

97 PRI, 2017, 9, 11.

98 PRI, 2016.

99 *Id.* at 4, 14.

100 *Id*. at 14.

101 See ICGN, 2020, 2. See also PricewaterhouseCoopers, London Business School & Leadership Institute, 2022, 10 (noting the acceleration of ESG due to the Covid-19 crisis).

102 See Sullivan & Bujno, 2021 (noting that sustainable investing increased 43% between 2018 and 2021).

103 See generally Bowley & Hill, 2022a.

104 Indeed, shareholder interest in ESG matters is by no means limited to institutional investors. Millennial and Gen Z investors are equally focused on ESG. See PricewaterhouseCoopers, London Business School & Leadership Institute, 2022, 3, 13; Bowley, Hill & Kourabas, 2022.

development is also reflected in international Shareholder Stewardship Codes, a growing number of which now explicitly refer to investors' ESG stewardship responsibilities,[105] with the 2020 UK Stewardship Code leading the way.[106]

Much of this pressure arises from institutional investors' concerns about the systemic financial risks,[107] particularly those associated with climate change, as exemplified by the 2020 activist campaign at ExxonMobil.[108] Such concerns are amplified for large, widely diversified institutional investors. This has led such investors to tackle negative externalities affecting their entire portfolio and they are increasingly willing to announce their commitment to ESG stewardship publicly in relation to matters such as emissions reductions.[109] The so-called 'Say on Climate' initiative for shareholders (which mirrors shareholders' 'Say on Pay' vote),[110] is another indication of this trend.[111] Numerous companies in Europe, the United States and the Asia-Pacific region have now adopted a 'Say on Climate' vote following shareholder pressure.[112]

Including ESG metrics in compensation packages is another way in which boards can signal their commitment to sustainability goals to investors and the market generally.[113] According to Hart and Zingales, the burgeoning ESG engagement by institutional investors represents a paradigm shift from 'shareholder value maximisation' to 'shareholder welfare maximisation'.[114]

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105 See generally Bowley & Hill, 2022a.

106 See FRC, 2020, 2, 15 (Principle 7 requires signatories to report any ESG initiatives). See also Katelouzou & Klettner, 2022.

107 PricewaterhouseCoopers, London Business School & Leadership Institute, 2022, 6.

108 Although the campaign was spearheaded by a small hedge fund, Engine No. 1 LLC, large institutional investors were pivotal to the ultimate success of the campaign. See Bowley & Hill, 2022a.

109 See, eg, Condon, 2020; Coffee, 2021; Gordon, 2022.

110 See, for example, Official Journal of the European Union, 2017, Article 9(a), 'Right to vote on the remuneration policy'. See generally Thomas & van der Elst, 2015.

111 See Bowley & Hill, 2022a; Galloway, 2022.

112 See generally Bowley & Hill, 2022a.

113 Bonham & Riggs-Cragun, 2022.

114 Hart & Zingales, 2022.

ICGN has stressed that, although investors were traditionally more focused on the link between pay and performance, in the era of Covid-19, they must also be attuned to issues related to the quantum of executive pay, inequality and fairness, and the connection to employee health and safety.[115] ICGN also supports the integration into executive pay of sustainability-performance factors, such as climate risk, which corporate executives 'can be held accountable for and directly influence'.[116]

Regulatory developments provide another pressure point in the ESG/sustainability stakes, with Europe a clear leader in this regard. Two recent European regulatory developments that may potentially prompt greater use of ESG-linked executive pay are the EU Taxonomy for Sustainable Activities (the 'EU Taxonomy')[117] and the proposed Directive on Corporate Sustainability Due Diligence ('CSDD').[118]

The EU Taxonomy is designed to be a uniform classification tool, predominantly focused on the environment. Its main goal is to promote sustainability and provide consistency in Europe by defining which economic activities are regarded as sustainable.[119] It has been said that the taxonomy is effectively 'the EU's answer to 'what is green?' for the purposes of achieving net zero carbon by 2050.[120] The EU Taxonomy also includes disclosure measures against sustainability, as opposed to merely financial, targets.[121]

The EU Platform on Sustainable Finance ('PSF') has recently explored extending the EU Taxonomy from environmental to social issues.[122] In its Final Report on Social Taxonomy,[123]

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115 See ICGN, 2020, 1–2.

116 *Id*. at 2.

117 See Official Journal of the European Union, 2020; European Commission, *EU taxonomy for sustainable activities*; EU Technical Expert Group on Sustainable Finance, 2020.

118 European Commission, 2022.

119 For a succinct summary of the EU Taxonomy's goals and structure, see Doyle, 2021. See also PRI, 2021.

120 See Worldfavor.

121 See, eg, comments by Will Martindale, PRI, 2021.

122 See PSF, 2022. For a succinct discussion of the PSF, 2022 report, see, eg, Travers Smith, 2022.

123 PSF, 2022.

the PSF stated that linking executive pay to ESG should constitute part of the EU Taxonomy given that it is already a widespread business practice in continental European and UK companies listed on major equity indices.[124]

The proposed CSDD, which constitutes another part of the EU's sustainable corporate governance initiative, imposes sustainability due diligence ('SDD') duties and liability risks[125] on corporate entities and their directors, who are defined to include members of senior management.[126] The proposed Directive also addresses ESG-related obligations in compensation design in Art. 15(3).[127] This provision has been described as essentially 'hortatory',[128] because there is no specified liability in the CSDD for failure to comply with the provision. Nonetheless, it is another potential pressure point that it may interact with ESG-related shareholder activism.[129]

Despite the momentum building for ESG-linked executive compensation (and that momentum is considerable),[130] enthusiasm for this development is by no means universal. Common arguments against pay for sustainability include the idea that extrinsic monetary rewards may 'crowd out' genuine motivations to behave in a pro-social way;[131] that ESG is already aligned with long-term business strategy, so that there is no need to measure and reward it separately;[132]

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124 *Id*. at 62.

125 See generally ECGI and Stockholm School of Economics, 2022.

126 European Commission, 2022, Art. 3(o)(i), which defines 'director' to mean 'any member of the administrative, management or supervisory bodies of a company'.

127 European Commission, 2022, Art. 15(3) requires Member States to ensure that companies 'duly take into account the fulfilment of … [certain obligations aligned with limiting emissions in accordance with the Paris Agreement] when setting variable remuneration, if variable remuneration is linked to the contribution of a director to the company's business strategy and long-term interests and sustainability.'

128 See Armour, 2022.

129 *Id*.

130 According to one study, 82% of senior corporate leaders around the world now have ESG targets in their pay. See PricewaterhouseCoopers, London Business School & Leadership Institute, 2022, 2.

131 See, eg, Winter, 2012; PricewaterhouseCoopers, London Business School & Centre for Corporate Governance, 2021, 6, 22.

132 See PricewaterhouseCoopers, London Business School & Centre for Corporate Governance, 2021, 11, 21; Gosling and O'Connor, 2021.

that 'ESG' is an overly broad and ambiguous a concept,[133] ill-suited to serving as an effective benchmark;[134] and that ESG-linked executive pay may constitute a new soft 'money for jam' style of target.[135]

Another common criticism is that ESG-related pay simply promises more than it can deliver. For example, evidence is 'decidedly mixed'[136] as to whether companies that adopt ESG metrics in executive compensation lead to improved outcomes and the ability to outperform competitors.[137] Some empirical studies present a positive picture of the long-term effects of ESG-linked executive pay,[138] suggesting that it can break the focus on short-term shareholder profit maximisation,[139] in favour of long-term innovation and value creation.[140] Other studies, however, suggest that any clear causal link between ESG-linked executive pay and improved corporate social performance by corporations is elusive.[141]

Other concerns relating to sustainability and executive pay include fears that institutional investor ESG pressure will not necessarily persist;[142] that corporate greenwashing is an omnipresent risk;[143] that broad or vague ESG goals in executive pay are unlikely to be

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133 See Pollman, 2021.

134 See, eg, PricewaterhouseCoopers, London Business School & Centre for Corporate Governance, 2021, 6, 22 (distinguishing between 'old' and 'new' ESG performance measures).

135 Maas, 2018, 576.

136 Edmans, 2021.

137 *Cf id.*; Gore & Blood, 2020. See also Koors, Meyer & Partners LLC, 2019.

138 See, eg, Flammer, Hong & Minor, 2019 (arguing that linking environmental and social performance goals to executive pay can enhance corporate governance by directing corporate managers' attention to 'stakeholders that are less salient but financially material to the firm in the long run'). *Id*. at 1098.

139 But see, eg, Lund & Pollman, 2021 (describing the powerful 'shareholderist orientation' of the complex set of rules and processes that constitute the US 'corporate governance machine').

140 Flammer, Hong & Minor, 2019, 1100, 1103–04.

141 Maas, 2018.

142 For example, BlackRock has recently indicated that it is unlikely to support climate change-related proposals it considers to be too onerous on companies, given the economic and geopolitical challenges resulting from the Russian invasion of Ukraine. See Masters, 2022.

143 See, eg, Stobbe & Zimmerman, 2022. See, eg, Edmans, Gabaix & Jenter, 2017, 387 (stating that '[a]ny high-powered incentive contract creates incentives to manipulate the performance measure(s) it relies upon').

effective;[144] and that widespread adoption of ESG-linked executive pay could increase managerial power and executive payoffs, while simultaneously decreasing shareholder oversight.[145] Also, at this point in time, ESG-linked pay tends to represent only a relatively small proportion of total compensation packages[146] and therefore may fail to override a managerial focus on other short-term goals.

In spite of these concerns about the effectiveness of ESG-linked executive pay, studies, such as that by Cohen et al.,[147] suggests that it is no longer accurate to describe the phenomenon as being 'in its infancy'.[148] It is now considered to constitute 'good governance' and a growing number of major public corporations include ESG factors, such as reductions in greenhouse gas emissions, into their executive pay packages.[149] The next section of our paper provides empirical evidence on the recent growth in ESG-linked executive compensation. It also examines the relevance of firm financial and corporate governance features on the adoption of ESG-linked pay.

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144 Flammer, Hong & Minor, 2019, 1102.

145 Bebchuk & Tallarita, 2022.

146 See Flammer, Hong & Minor, 2019, 1101; PricewaterhouseCoopers, London Business School & Leadership Institute, 2022, 15 (noting that average ESG weightings are currently around 10%, but that investors are pushing for an increase to 20%).

147 Cohen et al., 2022, p. 1 and fn 1.

148 PRI, 2016.

149 See, eg, Flammer, Hong & Minor, 2019, 1098 (noting that Alcoa, American Electric Power, Intel, Novo Nordisk, and Xcel Energy now integrate CSR criteria into executive pay). See also Gadinis & Miazad, 2020, 1407, 1419 (noting that companies such as Microsoft, Pepsi, Walmart, BP, Total and Chevron integrate ESG targets in executive pay). See generally, *id*. at 1419-22.

3. How Prevalent is 'Pay for Sustainable Performance' Today?

'To change something, build a new model that makes the existing model obsolete'.

R. Buckminster Fuller[150]

How widespread are sustainable performance factors in contemporary executive compensation contracts? To investigate the frequency and the determinants of the adoption of compensation policies linked to sustainability metrics, we built a large panel of listed firms selected from Refinitiv Asset4 database over the period 2002-2021. Starting from an unbalanced panel of 8.649 publicly traded firms, covering 58 countries and 19 industrial sectors, we selected all firms with available data on the link of executive compensation to ESG performance.

The Asset4 database includes two closely related variables on this issue: 'Sustainability Compensation Incentives' and 'Policy Executive Compensation ESG Performance'. Although according to their definitions they are expected to be closely correlated,[151] the behaviour of the variable 'Sustainability Compensation Incentives' raises some concerns about its quality, regarding its consistency and dynamics.[152] We therefore decided to select 'Policy Executive Compensation ESG Performance' as our main dependent variable of interest.

We detected that quite a large number of firms show multiple changes in the compensation policy for the variable 'Policy Executive Compensation ESG Performance'. Since we are

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150 Cited in Breckenridge, 2020.

151 'Sustainability Compensation Incentives' (Eikon Code = TR.AnalyticCSRCompIncen-tives), is defined as 'Is the senior executive's compensation linked to CSR / H&S / Sustainability targets?', while 'Policy Executive Compensation ESG Performance' (code = TR.PolicyExecComp-ESGPerformance) states if the company has the ESG compensation policy ('Does the company have an extra-financial performance-oriented compensation policy? The compensation policy includes remuneration for the CEO, executive directors, non-board executives, and other management bodies based on ESG or sustainability factors').

152 The variable 'Sustainability Compensation Incentives' is focused on senior executives while 'Policy Executive Compensation ESG Performance' covers a broader range of managers (the CEO, executive directors, non-board executives, and other management bodies), so it could be argued that the second variable should be TRUE when the former is TRUE. However, about 5% of data-points show 'Sustainability Compensation Incentives = TRUE' while 'Policy Executive Compensation ESG Performance = FALSE'. Furthermore, for 'Sustainability Compensation Incentives' this variable shows a very large volatility both at the aggregate level (the proportion of firms that adopted the policy drops from 33% in 2012 to 9% in 2016, while it remains quite stable for 'Policy Executive Compensation ESG Performance') and at firm level (on average, according to the variable 'Sustainability Compensation Incentives' firms changed their compensation policy 2.33 times, versus only 1.29 times for the variable 'Policy Executive Compensation ESG Performance').

interested in evaluating the determinants of a stable adoption of ESG-linked pay, we decided to delete all the firms with multiple changes of the variable (473 firms), obtaining a final number of 1.903 adopters that were contrasted with all non-adopters included in the Asset4 database.[153]

The final sample is a panel composed of 53.602 firm-year observations, and 6.863 firms. This data-set has a considerably larger size than the samples exploited in previous studies[154] and covers a relatively long period of time. This allows us to propose, to the best of our knowledge, the first global study on the determinants for ESG-linked executive compensation.

We begin our discussion with some descriptive statistics and an analysis of several 'macro-determinants' for ESG compensation. We then focus on the impact of firm financial and corporate governance characteristics on the likelihood of adopting an ESG-linked compensation policy.

A) Macro-determinants of ESG compensation

A growing number of listed firms included drivers related to sustainable performance in their executive remuneration packages. As shown in Figure 1, Section a), at the beginning of the first decade only a small fraction of firms adopted a compensation policy linked to ESG issues, and this proportion further decreased in the wake of the early 2000s recession. Since 2006 the increase in the adoption of sustainable compensation has been impressive, from 4.4% to 36.1% in 2021.

This global picture can be better interpreted if we consider the behaviour of firms headquartered in different countries. Figure 1, Section b) shows that firms in the United States and United Kingdom, which are the most important stock market-oriented economies, led the other countries in the first half of the period examined. However, in the following years,

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153 We also find 118 firms that discontinued the use of ESG compensation policies. Due to space constraints, they will not be studied in this chapter.

154 Maas & Rosendaal, 2016, analyzed a cross-section of 490 listed firms in 2010; Derchi et al., 2021, selected a panel of 5.070 firm-year observations corresponding to 848 US-based firms for the period 2002–2013; Cohen et al., 2022, analyzed a global panel of 22.603 firm-years observations and 4.395 firms.

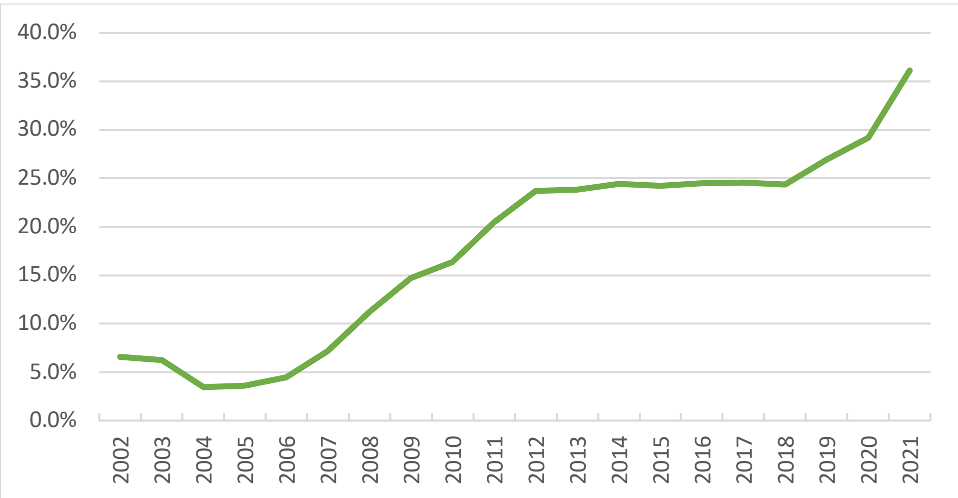
although ESG-linked executive compensation continued to increase in the United Kingdom, its rate of adoption in the United States stabilized and then shrank by more than 5%.

In Western Europe and, to a lesser extent, in other industrialized countries, the positive trend has been vigorous. Following the proposal of the Green Deal, European firms increased the adoption of some form of sustainable compensation from 35% to around 60%, filling the gap from UK firms.

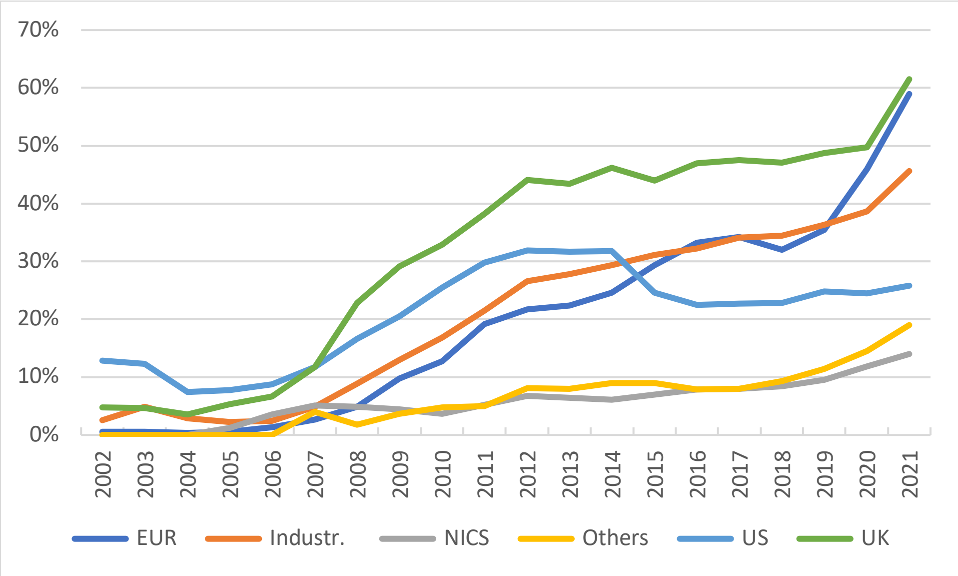
Newly Industrialized Countries (NICS) and the residual group of less developed countries (Others) show very similar dynamics in the average adoption of ESG compensation. They present much lower values than more developed countries, even though a notable increase can be observed in recent years.

Figure 1

Section a) Global dynamics of ESG-linked executive compensation



Section b) Dynamics of ESG-linked executive compensation by region

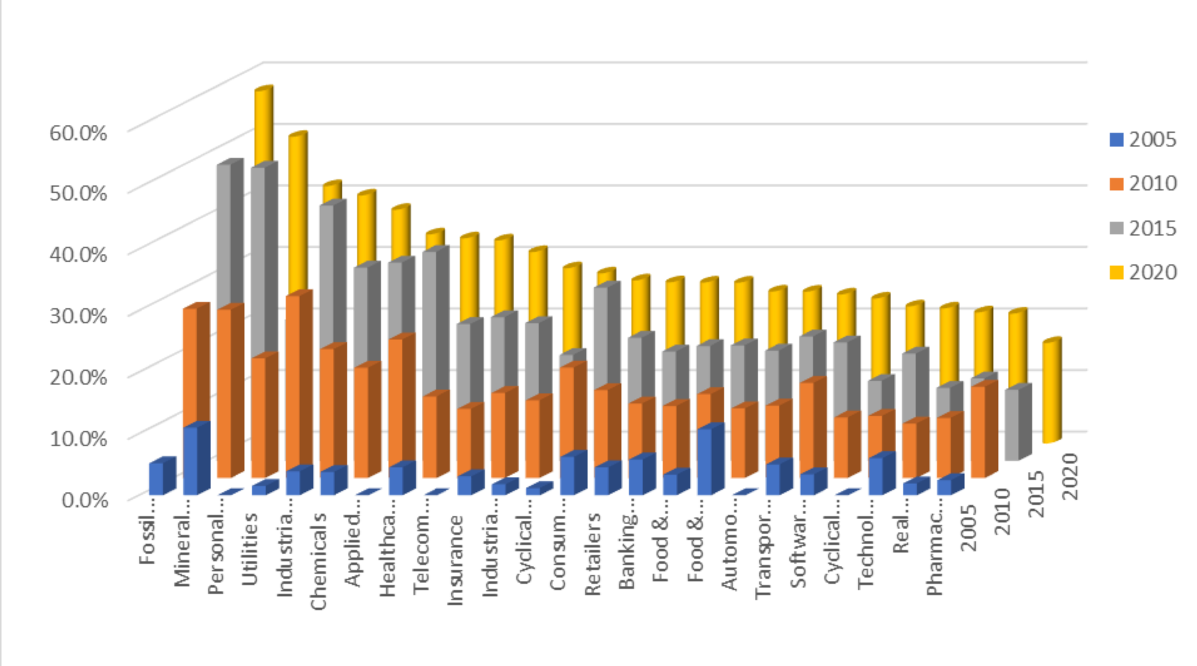


It is noteworthy, however, that individual countries show a significant discrepancy within each cluster; in particular, the 'Other Industrial Countries' cluster includes nations with quite limited average values (Argentina, Japan, Russian Federation, Turkey) and a few countries – Australia, South Africa and to a lesser extent, Canada – with a very high percentage of ESG-linked executive pay. Australia, with a stunning average of 53% over the whole period, is the country with the most frequent use of ESG executive compensation, a result probably influenced by the large proportion of firms operating in sectors with significant environmental impact.

The frequency in the use of ESG executive compensation could indeed be influenced by specific institutional features,[155] but it could also be related to its sectoral specialisation, since a large proportion of firms with significant environmental impact can be associated with a broader diffusion of ESG pay. As expected, Figure 2 shows that firms operating in industries with higher Co2 emissions or other environmental concerns (Fossil Fuels, Mineral Resources and Utilities) had a spectacular increase in the adoption of ESG compensation policies.

[155] Institutional and social features like legal origin, stronger political institutions, regulations, and social preferences are significant predictors of CSR adoption and performance at the firm level. See, eg, Liang & Renneboog, 2017.

Figure 2 The adoption of ESG-linked executive compensation, by industry



In sum, this descriptive analysis confirms the significant impact of common factors related to time, country, and industrial sector on employing compensation policies[156] linked to sustainability metrics. In the following analysis, which seeks to identify factors correlated to the adoption of ESG compensation, we remove the effect of these common factors by applying a battery of dummy variables in all our econometric estimates.

The first test we perform is aimed at understanding if the adoption of ESG-linked executive compensation is related to global economic conditions, highlighted by stock market returns. If the probability of adopting sustainable compensation practices should be negatively related to stock market returns, it could be argued that ESG policies are used to substitute the impact of the crisis on traditional stock-based compensation. We therefore estimated the following logit regression,

$$ESG\_comp_{i,t} = b_0 + b_1\ Mkt\_ret_{i,t} + B_2\ Sector_i + e_{i,t}$$

where ESG_comp is a variable that takes the value of one when the firm adopts a compensation policy linked to extra-financial performance, 0 otherwise (obviously, firms that already

156 For a cross-country analysis of differences in the level and structure of executive compensation see Barontini et al., 2013, Conyon et al., 2013.

adopted the ESG compensation policy are excluded from the sample); Mkt_ret is, alternatively, the global stock market index MSCI WORLD or MSCI indexes of the corresponding geographic areas; Sector is a battery of dummy variables that identify the business sector of each firm[157].

Quite surprisingly, estimates for both regressions are negative and statistically significant (for the global index, $b_1 = -0.4184^{***}$; for local indexes $b_1 = -0.5291^{***}$), showing that lower stock returns are associated to a higher likelihood of the adoption of an ESG compensation policy. In this simple specification, it cannot be ruled out that a bias due to omitted variables may affect the results. However, within the agency framework, they could be consistent with the objective of ensuring the compensation affected by a low stock-based pay.

The second test is aimed at estimating the impact of institutional characteristics on ESG-linked compensation policies. We try to explain if the considerable differences among economic areas previously shown in Figure 1 can be at least partially explained by the characteristics of the institutional environment at individual country-level[158]. Using the Worldwide Governance Indicators (WGIs) as a proxy of government quality,[159] we estimated the following logit regressions:

$$ESG\_comp_{i,t} = b_0 + b_1\ WGI_{i,t} + B_2\ Sector_i + B_3\ Year_t + e_{i,t}$$

in which the WGI variables capture the estimates of Democratic Freedom, Government Effectiveness, Regulatory Quality, Rule of Law, Corruption Control, Political Stability, and Absence of Terrorism (Political Stability).[160] Since Individual WGIs are quite highly correlated, we included each variable in the logit regressions separately, obtaining the results included in Table 1.

157 We apply the 4 digit business classification of Refinitiv, made up of 30 classes (the reference sector is '5010 = Fossil Fuels).

158 For a cross-country analysis on the link between the level of investor protection and CEO compensation see Bozzi, Barontini & Miroshnychenko, 2017.

159 World Bank discloses the indicators at https://info.worldbank.org/governance/wgi.

160 In the prior literature that used these variables see Chen et al., 2014; Ding, Qu & Wu, 2016; Miroshnychenko et al., 2021.

Table 1: Government quality and the adoption of ESG compensation policies

WGI Variable	Coefficient	Std Error
Democratic Freedom	+0.2772 ***	0.0238
Government Effectiveness	+0.0255	0.0161
Regulatory Quality	+0.1772 ***	0.0227
Rule of Law	+0.2448 ***	0.0208
Corruption Control	+0.1687 ***	0.0186
Political Stability	+0.0620 ***	0.0216

Year, and sector fixed effects (always statistically significant) omitted for brevity.

* $p < .10$; ** $p < .05$; *** $p < .01$.

All the World Governance Indicators are positively and significantly (with the exclusion of Government Effectiveness, whose p-value is 11.3%) correlated with the adoption of ESG-linked compensation policy. Since all these indicators of governance performance are standardised – they range from approximately -2.5 (weak) to 2.5 (strong) – the larger coefficients of Democratic Freedom[161] and Rule of Law[162] signal a higher impact on the likelihood of adopting an ESG-related compensation scheme.

These results are in line with other studies, showing that the quality of country regulation or corruption control is positively related to a firm's environmental practices and ESG disclosure.[163] According to institutional theory, in countries with high government quality, firms could be induced to adopt ESG compensation to seek legitimacy and respond to the pressures exerted by stakeholders.[164]

B) Financial and corporate governance firm characteristics

After the analysis of global economic and institutional effects on the adoption of sustainable compensation policies, we focus on individual variables covering the financial, corporate

161 Democratic Freedom corresponds to the variable Voice and Accountability and reflects perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

162 Rule of Law '[r]eflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence'.

163 See, eg, Fredriksson & Svensson, 2003; Cahan et al., 2016; Ioannou & Serafeim, 2012; Boura, Tsouknidis & Lioukas, 2020.

164 Delmas & Toffel, 2008.

governance and ESG profile of the firm. The definition of the variables is included in Appendix, Table A1.

Since the estimation of a multiple regression, including all the control variables, could be affected by collinearity and missing data problems, we start by exploring, for each independent variable X, the following logit regression

$$ESG\_comp_{i,t} = b_0 + b_1 X_{i,t-1} + B_2 \text{ Sector}_i + B_3 \text{ Country}_i + B_4 \text{ Year}_{t-1} + e_{i,t}$$

that also includes fixed effects for sector, country, and year. In all regressions, explanatory variables X are lagged because their causal effect on the change in the compensation policy is assumed to occur gradually.

For the sake of brevity, coefficients of the dummy variables will always be omitted. It is worth noting, however, that they are always statistically significant, confirming our previous discussion on 'macro-determinants' of ESG compensation. Obviously, since the impact of county, sector and business cycle fluctuations is captured by this set of dummy variables, the coefficients of the explanatory variables should be interpreted as a pure, differential effect within each firm's cluster.

- **Financial variables**

Starting with financial variables, we selected widely used proxies of firm size (computed as the log of Total Assets), profitability (Return on Investments and Return on Assets), valuation (Market to Book Value), employee 'intensity' and growth (Employee / Total Assets and Employees 1Year Growth), firm growth (Sales 1Year Growth) and financial leverage (Debt / Equity ratio).

As expected, results in Table 2 show that Size is strongly correlated with the adoption of ESG compensation policies. Large companies operate in a complex net of relationships and could be more influenced by external pressures on ESG strategies. Large firms, therefore, could be induced to implement a compensation policy linked to sustainability drivers, with the aim of aligning manager actions to stakeholders' preferences.

The positive coefficients of Return on Investments and Return on Assets show that, after taking into account the average profitability captured by the sector, country and year fixed effects, relatively more profitable firms are induced to include ESG incentives in executive pay. This result could be associated with different explanations: shareholders can try to induce a long-term strategy when it is perceived as financially sustainable, given the actual positive economic returns. On the other hand, managers can take the opportunity to increase their remuneration in a less transparent way, adopting a new form of 'camouflage compensation' when good financial results lessen shareholder control.[165]

Table 2: Financial variables and the adoption of ESG compensation policies

Independent Variable	Coefficient	Std Error
Size	+0.2632 ***	0.0215
Return on Investments	+1.0613 ***	0.2937
Return on Assets	+0.0123 ***	0.0034
Market To Book Value	-0.0051	0.0137
Sales 1Y Growth	-0.0015	0.0015
Employee / Total Assets	-9.1994	8.2544
Employees 1Y Growth	-0.0028	0.0021
Debt / Equity ratio	+0.0004	0.0005

Country, year, and sector fixed effects (always statistically significant) omitted for brevity.

* $p < .10$; ** $p < .05$; *** $p < .01$.

The other financial variables are not statistically significant. Indicators linked to firm growth, and therefore a long-term orientation (Market to Book Value and Sales 1Y Growth), are not correlated with the decision to adopt ESG-linked compensation policies. Quite surprisingly, the same result emerges for firms with a higher ratio between the number of employees and Total Assets or those that report an increase in the number of employees.

- **Corporate Governance variables**

Table 3 shows the results obtained for a set of Corporate Governance indicators on the adoption of ESG compensation policies, focusing on variables that capture the characteristics of the board of directors and its interaction with shareholders on compensation issues.

165 Adding the lagged stock market returns to this regression, both Return of Investments and Return on Assets confirm the results included in Table 2, while the variable 'Local Stock Market Returns' has negative and statistically significant coefficients - respectively -1.3846 (p-value 1.39%) and -1.3566 (p-value 1.58%). This evidence, that confirms the preliminary result at macro-level, could signal the aim to substitute stock-based compensation with ESG drivers when market returns are low.

The variable Board Size, as expected, is strongly correlated to ESG pay. This result is however linked to the effect of firm size, and if both variables are included in the same regression, only the latter remains statistically significant. After taking into account the size of the firm, larger boards of directors do not seem to be more oriented towards the adoption of sustainable compensation.

Table 3: Corporate Governance variables and the adoption of ESG compensation policies

Independent variable	Coefficient	Std Error
Board Size	0.0345 ***	0.0084
Board Diversity	0.0184 ***	0.0021
Executives Gender Diversity %	0.0060 ***	0.0018
Non-Executive Board Members %	0.0118 ***	0.0021
Independence Board Members %	0.0101 ***	0.0014
Board Meeting Attendance Average	0.0137 ***	0.0038
Board Specific Skills	-0.0017	0.0012
Experienced Board	-0.0320 ***	0.0074
Chairman is Ex-CEO	-0.0344	0.0305
CEO-Chairman Duality	-0.0436	0.0295
Anti-Takeover Devices	-0.0017	0.0145
Shareholders' Approval of Stock Comp.	-0.0072	0.0316
Shareholders' Vote on Executive Pay	-0.0169	0.0305
CSR Sustainability Committee	0.3318 ***	0.0273

Country, year, and sector fixed effects (always statistically significant) omitted for brevity.

* $p < .10$; ** $p < .05$; *** $p < .01$.

The four variables capturing the diversity and independence of board members are all significantly correlated to the adoption of ESG compensation. The effect of gender diversity on firms' ESG profile has been recently studied in the literature, often finding a positive relationship[166] that can be driven by the environmentally-friendly attitudes and more effective environmental actions of female directors.[167] Our results confirm this picture, showing that the adoption of remuneration policies linked to sustainability drivers is more likely with a higher female representation on the board.

166 Bear, Rahman & Post, 2010; Post, Rahman & Rubow, 2011; Li et al., 2017.

167 See Liu, 2018; Cosma et al. 2021. Liu (2018), in particular, finds that US firms with high board gender diversity are sued less often for environmental infringements.

Similarly, the association of a high ratio of non-executive or independent board members with the adoption of ESG compensation is consistent with previous literature. A large proportion of non-executive and independent directors provides alternative views of ESG strategies compared to insiders, taking into account the perspective of external stakeholders. By monitoring executives, these directors encourage decisions aimed at maximising long-term value, also through the adoption of environmental and CSR practices.[168] The positive correlation between board independence and the adoption of ESG compensation is therefore consistent with this literature.

The variables Board Meeting Attendance, Board Specific Skills and Experienced Board explore the relationship between the implementation of sustainable pay and, respectively, the activity of the board and competencies of its members. As could be expected, frequent participation in board meetings signals a proactive management style that is also focused on ESG strategy and related incentives. On the other hand, the variable Specific Skills – i.e. the percentage of board members who have either an industry-specific background or a strong financial background – is not statistically significant, while a negative impact is associated with the variable Experienced Board, which captures the average tenure of board members. Long-term relationships, probably linked to the presence of strategic blockholders, could in fact be associated with lower (both financial and ESG) variable compensation, due to the alignment of incentives determined by ownership concentration.[169]

The next five variables in Table 3 capture the effect of the power of top managers (or the impact of a tight shareholder control) on the probability of adoption of ESG compensation. When there is strong managerial control – e.g. when the Chair is (or has been) the CEO of the company, or when top managers are protected by multiple anti-takeover devices – a negative impact can be expected on the adoption of ESG incentives, because managers are less exposed to stakeholder pressure. By way of contrast, shareholders' approval of executive compensation plans is expected to be associated with implementation of ESG drivers within incentive pay schemes. Nevertheless, none of these variables are statistically significant.

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168 In previous literature, independent directors have been associated to compliance with environmental standards (Johnson & Greening, 1999; Post, Rahman & Rubow, 2011; Mallin, Michelon & Raggi, 2013) and improved CSR (Cuadrado-Ballesteros, Rodríguez-Ariza & García-Sánchez, 2015).

169 For example, Mehran, 1995, and Ryan & Wiggins, 2001, find that blockholder ownership is negatively related to stock option compensation.

The last independent variable in Table 3 captures the presence of the CSR Sustainability Committee. Previous literature detects a significant role of CSR committees in supporting the achievement of better non-financial performance.[170] As expected, our results show a positive effect of the CSR Committee on the adoption of ESG compensation, which could be a driver for a change in the firm strategy towards sustainability.

- **ESG Performance and Communication**

In this section, we conclude our empirical analysis by showing the relationship between previous ESG performance and the adoption of ESG compensation policies. We also analyse whether companies that do not 'walk their green talk' – i.e. those that present a misalignment between environmental practices and green communication – have a higher propensity to adopt ESG compensation.

The ESG performance is summarised thanks to the scoring methodology developed by Refinitiv on a large number of individual data-points included in Asset4. Refinitiv provides several score measures, from which we selected the ESG score and the specific Environmental, Social and Governance pillars. A Controversies Score is also available, which captures how scandals and legal disputes are published in the media. All scores have values between 0 and 100 and are calculated as percentile rankings that are weighted and combined into a single ESG score.[171]

Table 4 shows that the Global ESG score is statistically significant, revealing that firms adopting ESG-linked executive compensation in the previous year already had a better ESG

170 For example, Baraibar-Diez, Odriozola & Sanchez, 2019, find that sustainable compensation policies affect environmental performance especially when firms have a corporate social responsibility committee.

171 Starting from 186 variables, the scoring process obtains 10 category scores which represent several environmental, social and governance firm characteristics. To calculate the category scores, a percentile ranking methodology is adopted, aimed at assigning scores which are based on the performance of other firms in the same industry. The category scores are then rolled up into three pillar scores which correspond to the main ESG dimensions. To consider the importance of the ESG themes in different industries, a proprietary ESG Magnitude Matrix is implemented in the form of category weights. Similarly, the pillar scores are summed up to originate the aggregated ESG score which provides a general indication of the ESG performance of the firm. For additional information on the Refinitiv ESG methodology see: Refinitiv, 2022.

profile compared to all non-adopters in the same year/sector/country cluster. The effect is similar for each pillar score so it could be argued that the implementation of sustainable incentive schemes is more likely for firms with better preexisting Environmental, Social or Governance profiles.

Somewhat surprisingly, the ESG Controversies Score is negatively related to the adoption of ESG compensation. Since a better firm profile is coded with higher values (companies with no controversies will get a score of 100), it seems that firms with significant controversies have been induced to give further incentives to the managers related to ESG characteristics.

Table 4: ESG Scores and the Adoption of Pay for Sustainable Performance

Independent Variable	Coefficient	Std Error
ESG Score	0.0227 ***	0.0016
Environmental Score	0.0138 ***	0.0012
Social Score	0.0168 ***	0.0014
Corporate Governance Score	0.0151 ***	0.0013
ESG Controversies Score	-0.0060 ***	0.0013

Country, year, and sector fixed effects (always statistically significant) omitted for brevity.

* p < .10; ** p < .05; *** p < .01.

As previously discussed, the adoption of ESG compensation has been criticised due to the possibility that it could disguise and exacerbate the agency problem of executive pay.[172] As regards the environmental profile, these conflicts could induce greenwashing practices, or simply a misalignment between environmental practices and green communication. In order to check if the adoption of sustainable compensation policy is correlated with this discrepancy, we used the Green Performance (GPI) and Green Communication (GCI) indices, and computed the discrepancy index (DI) as their difference.[173]

More specifically, the Green Performance Index (GPI) is computed as the average of the following green practices: pollution prevention, green supply chain management and green product (see Appendix, Table 2). The Green Communication Index (GCI) is estimated as the average of a company's integration / vision and strategy KPIs (Appendix, Table 3), that proxy for the firm's commitment that has been disclosed about the development of an overarching vision

172 Bebchuk & Tallarita, 2022.

173 Miroshnychenko, Barontini & Testa, 2017; Testa et al., 2018.

and strategy. The Green Communication Index proxies the firm's capacity to competently display and communicate that financial, social and environmental dimensions are integrated in its daily decision-making.

We trace firms where green communication efforts diverge from green practices implementation, computing a discrepancy index (DI) that reflects the difference between firm's green communication and operational practices. Both components have been standardised to have a mean of 0 and a standard deviation of 1, thereby ensuring their comparability in the derivation of the discrepancy index DI. Therefore, a DI lower than zero would suggest that a firm has a 'Walker' attitude since more green practices are implemented compared to environmental communications. Conversely, a DI higher than zero would suggest a 'Talker' approach, more focused on external communication than real practices.

Results in Table 5 show that Green Performance is positively related to the adoption of ESG-related pay, confirming the results obtained with the Environmental Score. Nonetheless, the effect of Green Communication is stronger, and also the coefficient of the Discrepancy Index is positive and statistically significant. In both DI and GPI regressions, misalignment is confirmed as significantly correlated with the adoption of ESG compensation schemes.

Table 5: Environmental Performance, Communication, and the Adoption of ESG Compensation Policies

Independent Variable	Coefficient	Std Error
Green Performance Index	0.3903 ***	0.0462
Green Communication Index	0.5387 ***	0.0463
Discrepancy Index	0.2311 ***	0.0548
Discrepancy index	0.4947 ***	0.0599
Green Performance Index	0.5649 ***	0.0515

Country, year, and sector fixed effects (always statistically significant) omitted for brevity.

* $p < .10$; ** $p < .05$; *** $p < .01$.

4. Conclusion

'ESG issues have become much more important for us as long-term investors'.

Cyrus Taraporevala, State Street Global Investors[174]

This chapter reviews theories, regulation, and empirical analyses of executive compensation from a historical and international perspective, while also providing new evidence on the adoption of ESG targets in executive pay packages.

We start by examining some of the reasons underlying the rise of the performance-based compensation, which was proposed as a powerful tool aimed to align managerial interests with those of the company's shareholders within large corporations with dispersed ownership. The US trend toward higher pay quickly spread to other economic environments, such as continental Europe, where concentrated ownership, which creates conflicts between majority and minority shareholders, is prevalent. Furthermore, corporate scandals in the early 2000s and the 2007-2009 global financial crisis provoked vigorous debate about the design of performance-based pay and, in some jurisdictions, a strong regulatory response, particularly from Banking Supervisors.

More recently, increased attention to sustainability (especially for risks related to climate change) has led firms to focus on stakeholders' preferences regarding sustainability and has led to greater integration of ESG targets in executive compensation. As a result of pressure from both regulators and institutional investors, this trend has spread quickly across industrialised countries, with the goal of increasing corporate commitment to ESG values. However, the response to these pressures could ultimately be ineffective. There exists a risk, for example, that ESG-related pay might actually increase managerial power and executive payoffs, giving rise to a new form of extraction of private benefits.

The final section of our chapter looks at the prevalence today of ESG-linked executive pay. It provides new empirical evidence on the adoption of compensation policies linked to sustainability metrics, analyzing a panel of 8.649 publicly traded firms, covering 58 countries and 19 industrial sectors, in the period 2002-2021. We show that a growing number of listed

174 Cited in ILO, 2021.

firms included drivers related to sustainable performance in their executive remuneration packages, with notable differences related to sector and country characteristics. In particular, using the Worldwide Governance Indicators as a proxy of institutional quality, we find that, in countries with better government features, firms are more likely to adopt ESG compensation.

Focusing on individual financial and governance characteristics, we find a direct relationship between ESG pay and firm size, as well as with accounting returns. We do not, however, find such a relationship between ESG pay and market valuations and returns, or variables capturing firm growth. This evidence seems inconsistent with a correlation between a long-term perspective and the adoption of ESG compensation. Future research could therefore examine this issue more directly, considering the impact of ESG compensation on long-term ESG and financial performance, a topic on which the literature shows mixed results.

Moreover, many characteristics of the board of directors seem clearly related to the adoption of ESG compensation. Variables capturing the diversity and independence of board members are all statistically significant, confirming that a board which is concerned with the perspective of external stakeholders will be more supportive of adopting remuneration incentives linked to ESG practices.

Finally, we analyse the relationship between previous ESG performance and the adoption of a sustainable compensation policy. We find that firms are more likely to employ ESG-linked executive pay when they already have a significant global ESG profile, and better scores in specific Environmental, Social or Governance profiles. We also find that companies that do not appear to be 'walking their green talk', i.e. those that present a misalignment between environmental practices and green communication, have a higher propensity to adopt ESG compensation.

The evidence on the factors related to the adoption of ESG compensation therefore presents a mixed picture. There has clearly been dramatic growth in ESG-linked executive pay in recent times. However, given the risk of agency problems and greenwashing, it as yet unclear whether this trend will continue and translate into more sustainable corporate practices in the future.

APPENDIX

Table A1. Explanatory Variables

Variable	Description
Size	Firm's size proxied by the log of Total Assets.
Return on Investments	The ratio between EBIT (Earnings Before Interests & Taxes) and Total Assets.
Return on Assets	The ratio between operating income after taxes and Total Assets.
Market To Book Value	The ratio of Equity Market Value to Equity Book Value.
Sales 1Y Growth	1 year growth of Net sales or revenues.
Employee / Total Assets	The ratio between the number of employees and Total Assets.
Employees 1Y Growth	1 year growth of the number of employees.
Debt / Equity ratio	The ratio between Total Financial Debt and Book Equity Value.
Board Size	The number of Board Members.
Board Diversity	Is there female representation on the board OR is there foreign culture representation on the board? (% board members).
Executive Members Gender Diversity %	Percentage of female executive members.
Non-Executive Board Members %	Percentage of non-executive board members.
Independent Board Members	Percentage of independent board members, as reported by the company.
Board Meeting Attendance Average	The average overall attendance percentage of board meetings as reported by the company.
Board Specific Skills	Percentage of board members who have either an industry specific background or a strong financial background.
Experienced Board	Average number of years each board member has been on the board.
Chairman is Ex-CEO	Has the chairman previously held the CEO position in the company?
CEO-Chairman Duality	Does the CEO simultaneously chair the board OR has the chairman of the board been the CEO of the company?
Anti-Takeover Devices	The number of anti-takeover devices in place in excess of two.
Shareholders' Approval of Stock Compensation Plan	Does the company require that shareholder approval is obtained prior to the adoption of any stock-based compensation plan? – relates to any stock-based compensation plan approval or the renewal of an existing plan by shareholders.
Shareholders' Vote on Executive Pay	Do the company's shareholders have the right to vote on executive compensation?
CSR Sustainability Committee	Does the company have a CSR committee or team?
ESG Score	Overall company score based on the self-reported information in the environmental, social, and corporate governance pillars.
Environment Pillar	Weighted average relative rating of a company based on reported environmental information and the resulting three environmental category scores.
Social Pillar	Weighted average relative rating of a company based on reported social information and the resulting four social category scores.
Governance Pillar	Weighted average relative rating of a company based on reported governance information and the resulting three governance category scores.
ESG Controversies Score	Measures a company's exposure to environmental, social and governance controversies and negative events reflected in global media.
Green Performance Index	GPI, the index of Green Operational Practices, as described in Table A2.
Green Communication Index	GCI, the index of Green Communication Practices, as described in Table A3.
Discrepancy Index	The Discrepancy Index, computed ad the difference between GCI and GPI.

Table A2. Definition of green operational practices

Variable	Description
Pollution Prevention	Sum of the 10 emission and resource reduction KPIs: 1. Emissions (Does the company describe, claim to have or mention processes in place to improve emission reduction?-Yes=1/No=0); 2. Nitrogen oxides (NOx) and Sulfur Oxides (SOx) Emissions Reduction (Does the company report on initiatives to reduce, reuse, recycle, substitute, or phase out SOx or NOx emissions?-Yes=1/No=0); 3. Volatile Organic Compounds (VOC) Emissions Reductions (Does the company report on initiatives to reduce, substitute, or phase out VOC?-Yes=1/No=0); 4. Particular Matter Emissions Reductions (Does the company report on initiatives to reduce, substitute, or phase out particulate matter less than ten microns in diameter (PM10)?-Yes=1/No=0); 5. Waste Reduction Total (Does the company report on initiatives to recycle, reduce, reuse, substitute, treat or phase out total waste?-Yes=1/No=0); 6. e-Waste Reduction (Does the company report on initiatives to recycle, reduce, reuse, substitute, treat or phase out e-waste?-Yes=1/No=0); 7. Staff Transportation Impact Reduction (Does the company report on initiatives to reduce the environmental impact of transportation used for its staff?-Yes=1/No=0); 8. Water Efficiency (Does the company describe, claim to have or mention processes in place to improve its water efficiency?-Yes=1/No=0); 9. Energy Efficiency (Does the company describe, claim to have or mention processes in place to improve its energy efficiency?-Yes=1/No=0); 10. Toxic Chemicals or Substances Reduction (Does the company report on initiatives to reduce, reuse, substitute or phase out toxic chemicals or substances?-Yes=1/No=0);
Green Supply Chain Manage-ment	Sum of the 4 resource reduction KPIs: 1. Environmental Supply Chain (Does the company describe, claim to have or mention processes in place to include its supply chain in the company's efforts to lessen its overall environmental impact?-Yes=1/No=0); 2. Materials Sourcing Environmental Criteria (Does the company claim to use environmental criteria (e.g., life cycle assessment) to source or eliminate materials?-Yes=1/No=0); 3. Environmental Supply Chain Management (Does the company use environmental criteria (ISO 14001, energy consumption, etc.) in the selection process of its suppliers or sourcing partners?-Yes=1/No=0); 4. Environment Supply Chain Partnership Termination (Does the company report or show to be ready to end a partnership with a sourcing partner, if environmental criteria are not met?-Yes=1/No=0);
Green Product Development	Sum of the 3 product innovation KPIs: 1. Environmental Products (Does the company report on at least one product line or service that is designed to have positive effects on the environment or which is environmentally labelled and marketed?-Yes=1/No=0); 2. Product Environmental Responsible Use (Does the company report about product features and applications or services that will promote responsible, efficient, cost-effective and environmentally preferable use?-Yes=1/No=0); 3. Eco-design Products (Does the company report on specific products which are designed for reuse, recycling or the reduction of environmental impacts?-Yes=1/No=0);

Table A3. Definition of green communication practices

Variable	Description
Green Communication	Sum of the 8 integration/vision strategy KPIS 1. CSR Sustainability Committee (Does the company have a CSR committee or team?-Yes=1/No=0); 2. Integrated Vision and Strategy Management Discussion and Analysis (Does the company explicitly integrate financial and extra-financial factors in its management discussion and analysis section in the annual report?-Yes=1/No=0); 3. Global Compact (Has the company signed the UN Global Compact? Yes=1/No=0); 4. Stakeholder Engagement (Does the company explain how it engages with its stakeholders?-Yes=1/No=0); 5. CSR Sustainability Reporting (Does the company publish a separate CSR/H&S/Sustainability report or publish a section in its annual report on CSR/H&S/Sustainability?-Yes=1/No=0); 6. GRI Report Guidelines (Is the company's CSR report published in accordance with the GRI guidelines?-Yes=1/No=0); 7. CSR Sustainability Report Global Activities (Does the company's extra-financial report take into account the global activities of the company?-Yes=1/No=0); 8. CSR Sustainability External Audit (Does the company have an external auditor of its CSR/H&S/Sustainability report?- Yes=1/No=0).

Bibliography

Allen, William T., 'Our Schizophrenic Concept of the Business Corporation' (1992) 14 *Cardozo Law Review* 261.

APRA, Australian Prudential Regulation Authority, *Prudential Inquiry into the Commonwealth Bank of Australia* (30 April 2018), https://www.apra.gov.au/sites/default/files/CBA-Prudential-Inquiry_Final-Report_30042018.pdf.

Armour, John, 2016a, 'Volkswagen's Emissions Scandal: Lessons for Corporate Governance? (Part 1)', Oxford Business Law Blog, 17 May 2016, https://blogs.law.ox.ac.uk/business-law-blog/blog/2016/05/volkswagen%E2%80%99s-emissions-scandal-lessons-corporate-governance-part-1.

Armour, John, 2016b, 'Volkswagen's Emissions Scandal: Lessons for Corporate Governance? (Part 2)', Oxford Business Law Blog, 18 May 2016, https://blogs.law.ox.ac.uk/business-law-blog/blog/2016/05/volkswagen%E2%80%99s-emissions-scandal-lessons-corporate-governance-part-2.

Armour, John, 'Directors' Duties and Climate Remuneration', presentation at Online Policy Workshop on *European Commission Directive on Corporate Sustainability Due Diligence*, 28–29 March 2022, https://ecgi.global/content/corporate-sustainability-due-diligence.

Armour, John, Jeffrey Gordon & Geeyoung Min, 'Taking Compliance Seriously' (2020) 37 *Yale Journal on Regulation* 1.

Avgouleas, Emilios, 'The Global Financial Crisis, Behavioural Finance and Financial Regulation: In Search of a New Orthodoxy' (2009) 9 *Journal of Corporate Law Studies* 23.

Baraibar-Diez, Elisa, María D. Odriozola, José Luis Fernández Sánchez, 'Sustainable Compensation Policies on Environmental, Social, and Governance Scores' (2019) 26 *Corporate Social Responsibility and Environmental Management* 1457.

Barontini, Roberto & Stefano Bozzi, 'Board Compensation and Ownership Structure: Empirical Evidence for Italian Listed Companies' (2011) 15 *Journal of Management and Governance* 59.

Barontini, Roberto, Stefano Bozzi, Guido Ferrarini e Cristina Ungureanu *'Directors' Remuneration Before and After the Crisis: Measuring the Impact of Reforms in Europe'*, in Massimo Belcredi & Guido Ferrarini (eds.) *Boards and Shareholders in European Listed Companies* (Cambridge University Press, 2013), 251.

Barontini, Roberto & Lorenzo Caprio, 'The Effect of Family Control on Firm Value Performance: Evidence from Continental Europe' (2006) 12 *European Financial Management* 689.

Bear, Stephen, Noushi Rahman & Corinne Post, 'The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Behaviour' (2010) 97 *Journal of Business Ethics* 207.

Bebchuk, Lucian & Yaniv Grinstein, 'The Growth of Executive Pay' (2005) 21 *Oxford Review of Economic Policy* 283.

Bebchuk, Lucian A. & Holger Spamann, 'Regulating Bankers' Pay' (2010) 98 *Georgetown Law Journal* 247.

Bebchuk, Lucian A. & Roberto Tallarita, 'The Perils and Questionable Promise of ESG-Based Compensation' (in press, *The Journal of Corporation Law*, 2022).

BIS, Department for Business Innovation & Skills, 'A Long-Term Focus for Corporate Britain: A Call for Evidence' (October 2010), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/31563/10-1225-long-term-focus-corporate-britain.pdf.

Bonham, Jonathan & Amoray Riggs-Cragun, 'An Accounting Framework for ESG Reporting' (2022) (Working Paper, cited in Cohen, Shira et al., 'Executive Compensation Tied to ESG Performance: International Evidence' (April 2022) ECGI Finance Working Paper N° 825/2022, https://ecgi.global/sites/default/files/working_papers/documents/esgfinal_0.pdf).

Boura, Maria, Dimitris A. Tsouknidis & Spyros Lioukas 'The Role of pro-Social Orientation and National Context in Corporate Environmental Disclosure' (2020) 17 *European Management Review* 1027.

Bowley, Tim & Jennifer G. Hill, 2022a, 'Stewardship Codes, ESG Activism and Transnational Ordering', in Thilo Kuntz (ed.) *Research Handbook on Environmental, Social, and Corporate Governance* (in press, Cheltenham, UK: Edward Elgar Publishing Ltd, 2022).

Bowley, Tim & Jennifer G. Hill, 2022b, 'The Global Stewardship Ecosystem' (October 2022) ECGI Law Working Paper N° 660/2022, https://ecgi.global/sites/default/files/working_papers/documents/ecosystemfinal.pdf.

Bowley, Tim, Jennifer G. Hill & Steve Kourabas 'Shareholder Engagement Inside and Outside the Shareholder Meeting' (2022) Working Paper (on file with the authors).

Bozzi, Stefano, Roberto Barontini & Ivan Miroshnychenko 'Investor Protection and CEO Compensation in Family Firms' (2017), 14 *Corporate Ownership & Control* 17.

Braithwaite, Tom, ‘US ‘Pay Tsar’ to Vet Executive Packages’, Financial Times, 10 June 2009.

Bratton, William W. & Michael L. Wachter, ‘Shareholder Primacy's Corporatist Origins: Adolf Berle and the Modern Corporation’ (2008) 34 *The Journal of Corporation Law* 99.

Breckenridge, Garrison, ‘You Say You Want a Revolution: What Blockchain Can Learn from One Man’s Attempt to Save the World’, Cointelegraph Magazine, 9 June 2020.

Cahan, Steven F., Charl De Villiers, Debra C. Jeter, Vic Naiker & Chris J. Van Staden, ‘Are CSR Disclosures Value-Relevant? Cross-Country Evidence’ (2016) 25 *European Accounting Review* 579.

CEBS, Committee of European Banking Supervisors, *Guidelines on Remuneration Policies and Practices* (10 December 2010), https://www.eba.europa.eu/sites/default/documents/files/documents/10180/106961/a3ab77c9-980f-4994-b2cd-397413b77084/Guidelines.pdf.

Chandler, William B. III & Leo E. Strine Jr, ‘The New Federalism of the American Corporate Governance System: Preliminary Reflections of Two Residents of One Small State’ (2003) 152 *University of Pennsylvania Law Review* 953.

Changing the Present, *Quotes About Agriculture*, https://changingthepresent.org/pages/quotes-about-agriculture.

Chase, Randall & The Associated Press, 'Elon Musk's Longtime Friend Defends His Role Designing the Tesla CEO's $55 Billion Pay Package: ‘He Has Been as Hard Working a CEO as there Can Be’', Fortune, 15 November 2022.

Cheffins, Brian R., 'Corporate Governance since the Managerial Capitalism Era' (2015) 89 *Business History Review* 717.

Chen, Qiu, Wenxuan Hou, Wanli Li, Craig Wilson & Zhenyu Wu 'Family control, regulatory environment, and the growth of Entrepreneurial firms: International evidence' (2014) 22 *Corporate Governance: An International Review* 132–144.

Cheng, Minying, Bingxuan Lin & Minghai Wei, 'Executive Compensation in Family Firms: The Effect of Multiple Family Members' (2015) 32 *Journal of Corporate Finance* 238.

Cleary Gottlieb, 'Alert Memo: The Revised FSA Remuneration Code', Cleary Gottlieb, 22 December 2010, www.clearygottlieb.com/-/media/organize-archive/cgsh/files/publication-pdfs/the-revised-fsa-remuneration-code.pdf.

Coffee, John C. Jr, 'What Caused Enron?: A Capsule Social and Economic History of the 1990s' (2004) 89 *Cornell Law Review* 269.

Coffee, John C. Jr, 'The Coming Shift in Shareholder Activism: From 'Firm-Specific' to 'Systematic Risk' Proxy Campaigns (and How to Enable Them)' (2021) 16 *Brooklyn Journal of Corporate Financial & Commercial Law* 45.

Cohen, Shira, Igor Kadach, Gaizka Ormazabal & Stefan Reichelstein, 'Executive Compensation Tied to ESG Performance: International Evidence' (April 2022) ECGI Finance Working Paper N° 825/2022, https://ecgi.global/sites/default/files/working_papers/documents/esgfinal_0.pdf.

Companies Act 2006, c. 46 (UK).

Condon, Madison, 'Externalities and the Common Owner' (2020) 95 *Washington Law Review* 1.

Conoley, Moira, ‘Moves to Halt Another Decade of Excess’, Financial Times, 5 August 1999, 10.

Conway, Meredith R., ‘Money for Nothing and the Stocks for Free: Taxing Executive Compensation’ (2008) 17 *Cornell Journal of Law & Public Policy* 383.

Conyon, Martin J., Nuno Fernandez, Miguel A. Ferreira, Pedro Matos & Kevin J. Murphy, ‘The Executive Compensation Controversy: A Transatlantic Analysis’, in Tito Boeri, Claudio Lucifora & Kevin J. Murphy (eds.) *Executive Remuneration and Employee Performance-Related Pay* (Oxford: Oxford University Press, 2013), 16.

Conyon, Martin J. & Kevin J. Murphy, ‘The Prince and the Pauper? CEO Pay in the United States and the United Kingdom’ (2000) 110 *The Economic Journal* F640.

Core, John E., Wayne Guay R. & Randall S. Thomas, ‘Is US CEO Compensation Inefficient Pay Without Performance?’ (2005) 103 *Michigan Law Review* 1142.

Cosma, Simona, Paola Schwizer, Lorenzo Nobile & Rossella Leopizzi, ‘The Stakeholder Engagement in the European Banks: Regulation versus Governance. What Changes After the NF Directive?’ (2021) 28 *Corporate Social Responsibility and Environmental Management* 1091.

Crotty, James, ‘Structural Causes of the Global Financial Crisis: A Critical Assessment of the ‘New Financial Architecture’’ (2009) 33 *Cambridge Journal of Economics* 563.

Cuadrado-Ballesteros, Beatriz, Lázaro Rodríguez-Ariza & Isabel-Maria García-Sánchez, ‘The Role of Independent Directors at Family Firms in Relation to Corporate Social Responsibility Disclosures’ (2015) 24 *International Business Review* 890.

Delmas, Magali A. & Michael W. Toffel, 'Organizational Responses to Environmental Demands: Opening the Black Box' (2008) 29 *Strategic Management Journal* 1027.

Derchi, Giovanni-Battista, Laura Zoni & Andrea Dossi, 'Corporate Social Responsibility Performance, Incentives, and Learning Effects' (2021) 173 *Journal of Business Ethics* 617.

Ding, Shujun, Baozhi Qu & Zhenyu Wu, 'Family Control, Socioemotional Wealth, and Governance Environment: The Case of Bribes' (2016) *Journal of Business Ethics* 639.

Directors' Remuneration Report Regulations 2002, N° 1986 (UK).

Dodd-Frank Act, Dodd-Frank Wall Street Reform and Consumer Protection of 2010, Pub. L. 111-203, 124 Stat. 1376.

Doyle, David Henry, 'A Short Guide to the EU's Taxonomy Regulation', S&P Global, 12 May 2021, www.spglobal.com/esg/insights/a-short-guide-to-the-eu-s-taxonomy-regulation.

EBA, European Banking Authority, *Guidelines on Sound Remuneration Policies Under Articles 74(3) and 75(2) of Directive 2013/36/EU and Disclosures Under Article 450 of Regulation (EU) N° 575/2013*, EBA/GL/2015/22 (27 June 2016), https://www.eba.europa.eu/sites/default/documents/files/documents/10180/1314839/5057ed7d-8bf1-41b4-ad74-70474d6c3158/EBA-GL-2015-22%20Guidelines%20on%20Sound%20Remuneration%20Policies_EN.pdf?retry=1.

EBA, European Banking Authority, *Final Report on Guidelines on Sound Remuneration Policies Under Directive 2013/36/EU*, EBA/GL/2021/04 (2 July 2021), https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2021/1016720/Draft%20Final%20report%20on%20GL%20on%20remuneration%20policies%20under%20CRD.pdf.

ECGI & Stockholm School of Economics, Online Policy Workshop, *European Commission Directive on Corporate Sustainability Due Diligence*, 28–29 March 2022, https://ecgi.global/content/corporate-sustainability-due-diligence.

Edmans, Alex, 'Is Sustainable Investing Really a Dangerous Placebo?', Medium, 30 September 2021, https://medium.com/@alex.edmans/is-sustainable-investing-really-a-dangerous-placebo-70d4767864db.

Edmans, Alex, 'The End of ESG' (September 2022) ECGI Finance Working Paper N° 847/2022, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4221990.

Edmans, Alex, Xavier Gabaix & Dirk Jenter, 'Executive Compensation: A Survey of Theory and Evidence', in Benjamin Hermalin & Michael Weisbach (eds.), *Handbook of the Economics of Corporate Governance*, vol. 1 (Amsterdam: North-Holland, 2017), 383.

Eichenwald, Kurt, 'Enron's Many Strands: Executive Compensation', The New York Times, 1 March 2002.

Ellis, Robert Dean, 'Equity Derivatives, Executive Compensation, and Agency Costs' (1998) 35 *Houston Law Review* 399.

European Commission, *EU taxonomy for sustainable activities*, https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en#200903.

European Commission, *Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937* (23 February 2022), https://ec.europa.eu/info/sites/default/files/1_1_183885_prop_dir_susta_en.pdf.

EU Technical Expert Group on Sustainable Finance, 'Taxonomy: Final report of the Technical Expert Group on Sustainable Finance (March 2020), https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf.

Faccio, Mara & Larry H.P. Lang, 'The Ultimate Ownership of Western European Corporations' (2002) 65 *Journal of Financial Economics* 365.

Fahlenbrach, Rüdiger & René M. Stulz, 'Bank CEO Incentives and the Credit Crisis' (2011) 99 *Journal of Financial Economics* 11.

Ferrarini, Guido & Niamh Moloney, 'Executive Remuneration in the EU: The Context for Reform' (2005) 21 *Oxford Review of Economic Policy* 304.

Ferrarini, Guido, Niamh Moloney & Maria Cristina Ungureanu, 'Understanding Directors' Pay in Europe: A Comparative and Empirical Analysis' (August 2009) ECGI Working Paper N° 126/2009, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1418463.

Ferrarini, Guido, Niamh Moloney & Maria-Cristina Ungureanu, 'Executive Remuneration in Crisis: A Critical Assessment of Reforms in Europe' (2010) 10 *Journal of Corporate Law Studies* 73.

Ferrarini, Guido & Maria C. Ungureanu, 'Executive Pay at Ailing Banks and Beyond: A European Perspective' (2010) 5 *Capital Markets Law Journal* 197.

Ferrarini, Guido & Maria Cristina Ungureanu, 'Economics, Politics and the International Principles for Sound Compensation Practices: An Analysis of Executive Pay at European Banks' (2011) 64 *Vanderbilt Law Review* 429.

Ferri, Fabrizio & David A. Maber, ‘Say on Pay Votes and CEO Compensation: Evidence from the UK’ (2013) 17 *Review of Finance* 527.

Flammer, Caroline, Bryan Hong & Dylan Minor, ‘Corporate Governance and the Rise of Integrating Corporate Social Responsibility Criteria in Executive Compensation: Effectiveness and Implications for Firm Outcomes’ (2019) 40 *Strategic Management Journal* 1097.

FRC, Financial Reporting Council, *The UK Stewardship Code* 2020, www.frc.org.uk/getattachment/5aae591d-d9d3-4cf4-814a-d14e156a1d87/Stewardship-Code_Dec-19-Final-Corrected.pdf.

Fredriksson, Per G. & Jakob Svensson, ‘Political Instability, Corruption and Policy Formation: The Case of Environmental Policy’ (2003) 87 *Journal of Public Economics* 1383.

Frydman, Carola & Raven E. Saks, ‘Executive Compensation: A New View from a Long-Term Perspective, 1936-2005’ (2010) 23 *The Review of Financial Studies* 2099.

FSA, Financial Services Authority, *The Turner Review: A Regulatory Response to the Global Banking Crisis* (March 2009).

FSA, Financial Services Authority, *Revising the Remuneration Code: Feedback on CP 10/19 and Final Rules* (December 2010).

FSF, Financial Stability Forum, *FSF Principles for Sound Compensation Practices* (2 April 2009), https://www.fsb.org/wp-content/uploads/r_0904b.pdf.

Gadinis, Stavros & Amelia Miazad, ‘Corporate Law and Social Risk’ (2020) 73 *Vanderbilt Law Review* 1401.

Galloway, John, ‘Policy Insights: Say on Climate’, Harvard Law School Forum on Corporate Governance, 8 June 2022.

Gordon, Jeffrey N., ‘What Enron Means for the Management and Control of the Modern Business Corporation: Some Initial Reflections’ (2002) 69 *The University of Chicago Law Review* 1233.

Gordon, Jeffrey N., ‘‘Say on Pay’: Cautionary Notes on the U.K. Experience and the Case for Shareholder Opt-In’ (2009) 46 *Harvard Journal on Legislation* 323.

Gordon, Jeffrey N., ‘Systematic Stewardship’ (2022) 47 *The Journal of Corporation Law* 627.

Gore, Al & David Blood, ‘Capitalism After the Coronavirus’, Wall St Journal, 29 June 2020.

Gosling, Tom & Phillippa O’Connor, ‘Executive Pay and ESG Performance’, Harvard Law School Forum on Corporate Governance, 12 April 2021.

Hart, Oliver & Luigi Zingales, ‘The New Corporate Governance’ (August 2022) ECGI Law Working Paper N° 640/2022, https://ecgi.global/sites/default/files/working_papers/documents/newcgfinal_0.pdf.

HBR Editors, ‘The Best-Performing CEOs in the World’, Harvard Business Review, November 2014.

HBR Editors, ‘The Best-Performing CEOs in the World, 2019’, Harvard Business Review, November–December 2019.

Hill, Jennifer G., 2012a, ‘Regulating Executive Remuneration After the Global Financial Crisis: Common Law Perspectives’, in Randall S. Thomas & Jennifer G. Hill (eds.), *Research Handbook on Executive Pay* (Cheltenham, UK: Edward Elgar Publishing Ltd, 2012), 219.

Hill, Jennifer G., 2012b, 'Why Did Australia Fare So Well in the Global Financial Crisis?', in Eilis Ferran, Niamh Moloney, Jennifer G. Hill & John C. Coffee Jr., *The Regulatory Aftermath of the Global Financial Crisis* (Cambridge: Cambridge University Press), 203.

Hill, Jennifer G., 'Corporations, Directors' Duties and the Public/Private Divide', in Arthur Laby & Jacob Hale Russell (eds.), *Fiduciary Obligations in Business* (Cambridge: Cambridge University Press, 2021), 285.

Hill, Jennifer G., Ronald W. Masulis & Randall S. Thomas, 'Comparing CEO Employment Contract Provisions: Differences Between Australia and the United States' (2011) 64 *Vanderbilt Law Review* 557.

Hill, Jennifer & Randall Thomas, 'Introduction', in Randall S. Thomas & Jennifer G. Hill (eds.), *Research Handbook on Executive Pay* (Cheltenham, UK: Edward Elgar Publishing Ltd, 2012), 1-3.

ICGN, International Corporate Governance Network, *ICGN Viewpoint: Covid-19 and Executive Remuneration*, (June 2020), www.icgn.org/sites/default/files/2021-06/ICGN%20Viewpoint%20COVID-19%20and%20Executive%20Remuneration.pdf.

ILO (International Labour Organisation), *Investor Relation: The Real Value of Gender Equality* (27 October 2021).

Ioannou, Ioannis & George Serafeim 'What drives corporate social performance? The Role of Nation-level Institutions' (2012) 43 *Journal of International Business Studies*, 834.

Internal Revenue Code (I.R.C.) of 1995 (US).

Jackson, Tony, 'The Fat Cats Keep Getting Fatter', Financial Times, 1 August 1998, 9.

Jaeger, Felix, 'Say No to Climate Change, Say Yes to 'Say on Climate'', Oxford Business Law Blog, 13 July 2021.

Jensen, Michael C. & Kevin J. Murphy, 'CEO Incentives – It's Not How Much You Pay, But How' (1990) 68 *Harvard Business Review* 138.

Johnson, Richard A. & Daniel W. Greening, 'The Effects of Corporate Governance and Institutional Ownership Types on Corporate Social Performance' (1999) 42 *Academy of Management Journal* 564.

Katelouzou, Dionysia & Alice Klettner, 'Sustainable Finance and Stewardship: Unlocking Stewardship's Sustainability Potential', in Dionysia Katelouzou & Dan W. Puchniak (eds.) *Global Shareholder Stewardship* (Cambridge: Cambridge University Press, 2022), 549.

Koors, Janice, Pearl Meyer & Partners LLC, 'Executive Compensation and ESG', Harvard Law School Forum on Corporate Governance, 10 September 2019.

Li, J., Zhao, F., Chen, S., Jiang, W., Liu, T., & Shi, S. 'Gender Diversity on Boards and Firms' Environmental Policy' (2017) 26 *Business Strategy and the Environment* 306-315.

Liang, Hao & Luc Renneboog, 'On the Foundations of Corporate Social Responsibility' (2017), 72 *Journal of Finance* 853.

Lean CX, 'Leadership Quote – Charlie Munger on Incentives and Outcomes' (24 November 2020), www.leancxscore.com/leadership-quote-charlie-munger-on-incentives-and-outcomes/.

Levitt, Arthur Jr, 'Corporate Culture and the Problem of Executive Compensation' (2005) 30 *The Journal of Corporation Law* 749.

Liang, Hao & Luc Renneboog, ‘On the Foundations of Corporate Social Responsibility’ (2017) 72 *The Journal of Finance* 853.

Liu, Chelsea, ‘Are Women Greener? Corporate Gender Diversity and Environmental Violations’ 52 *Journal of Corporate Finance* 118.

Loewenstein, Mark J., ‘Reflections on Executive Compensation and a Modest Proposal for (Further) Reform’ (1996) 50 *SMU Law Review* 201.

Lund, Dorothy S. & Elizabeth Pollman, ‘The Corporate Governance Machine’ (2021) 121 *Columbia Law Review* 2563.

Maas, Karen, ‘Do Corporate Social Performance Targets in Executive Compensation Contribute to Corporate Social Performance?’ (2018) 148 *Journal of Business Ethics* 573.

Maas, Karen & Sanne Rosendaal, ‘Sustainability Targets in Executive Remuneration: Targets, Time Frame, Country and Sector Specification’ (2016) 25 *Business Strategy and the Environment* 390.

Mallin, Christine, Giovanna Michelon & Davide Raggi, ‘Monitoring Intensity and Stakeholders’ Orientation: How Does Governance Affect Social and Environmental Disclosure?’ (2013) 114 *Journal of Business Ethics* 29.

Masters, Brooke, ‘BlackRock to Vote against Climate Resolutions’, Financial Times, 12 May 2022, 6.

Mehran, Hamid, ‘Executive Compensation Structure, Ownership, and Firm Performance’ (1995) 38 *Journal of Financial Economics* 163.

Miroshnychenko, Ivan, Roberto Barontini & Francesco Testa, 'Green Practices and Financial Performance: A Global Outlook' (2017) 147 *Journal of Cleaner Production* 340.

Miroshnychenko, Ivan, Alfredo De Massis, Danny Miller & Roberto Barontini 'Family Business Growth Around the World' (2021) 45 *Entrepreneurship Theory and Practice* 682-708.

Miske, Ryan, 'Can't Cap Corporate Greed: Unintended Consequences of Trying to Control Executive Compensation through the Tax Code' (2004) 88 *Minnesota Law Review* 1673.

Murphy, Kevin J. & Michael C. Jensen, 'The Politics of Pay: The Unintended Consequences of Regulating Executive Compensation' (2018) 3 *Journal of Law, Finance, and Accounting* 189.

OECD, Organisation for Economic Co-operation and Development, *OECD Corporate Governance Factbook 2021* (2021), www.oecd.org/corporate/OECD-Corporate-Governance-Factbook.pdf.

Official Journal of the European Union, *Commission Recommendation of 14 December 2004 fostering an appropriate regime for the remuneration of directors of listed companies*, 2004/913/EC, L385/55 (2004), https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004H0913&from=EN.

Official Journal of the European Union, *Commission Recommendation of 15 February 2005 on the role of non-executive or supervisory directors of listed companies and on the committees of the (supervisory) board,* 2005/162/EC, L52/51 (2005), https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:052:0051:0063:EN:PDF.

Official Journal of the European Union ('CRDIII'), *Directive 2010/76/EU of the European Parliament and of the Council of 24 November 2010 amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitisations, and for the supervisory review of remuneration policies*, L 329/3 (2010) https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:329:0003:0035:EN:PDF.

Official Journal of the European Union, *Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC*, L176/338 (2013) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0036.

Official Journal of the European Union, *Directive (EU) of 2017/828 of the European Parliament and of the Council of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement*, L132/1 (2017) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017L0828.

Official Journal of the European Union, *Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088*, L198/13 (2020) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852.

Pargendler, Mariana, 'The Rise of International Corporate Law' (2021) 98 *Washington University Law Review* 1765.

Perry, Todd & Marc Zenner, 'CEO Compensation in the 1990s: Shareholder Alignment or Shareholder Expropriation?' (2000) 35 *Wake Forest Law Review* 123.

Pierce, Commissioner Hester M., 'We Are Not the Securities and Environment Commission – At Least Not Yet', *US Securities and Exchange Commission Statement* (21 March 2022), www.sec.gov/news/statement/peirce-climate-disclosure-20220321.

Pollman, Elizabeth, 'Corporate Social Responsibility, ESG, and Compliance', in Benjamin van Rooij & D. Daniel Sokol (eds.), *Cambridge Handbook of Compliance* (Cambridge: Cambridge University Press, 2021) 662.

Post, Corinne, Noushi Rahman & Emily Rubow, 'Green Governance: Boards of Directors' Composition and Environmental Corporate Social Responsibility' (2011) 50 *Business & Society* 189.

PRI, Principles for Responsible Investment, *About the PRI*, www.unpri.org/pri/about-the-pri.

PRI, Principles for Responsible Investment, *Integrating ESG Issues into Executive Pay: A Review of Global Utility and Extractive Companies* (2016), www.unpri.org/download?ac=1798.

PRI, Principles for Responsible Investment, *PRI Strategic Plan 2018–21: Making the Blueprint a Reality* (October 2017), https://d8g8t13e9vf2o.cloudfront.net/Uploads/m/g/u/PRIStrategy_2018-21_v2.pdf.

PRI, Principles for Responsible Investment, *EU Taxonomy: Final Report*, Video (2021), https://www.youtube.com/watch?v=b4HNZ2Gmxgk.

Price, John, 'Climate Change', Keynote Address, *Centre for Policy Development: Financing a Sustainable Economy* (Sydney, 18 June 2018).

PricewaterhouseCoopers, London Business School & Centre for Corporate Governance, *Paying Well by Paying for Good* (2021), www.pwc.co.uk/human-resource-services/assets/pdfs/environmental-social-governance-exec-pay-report.pdf.

PricewaterhouseCoopers, London Business School & Leadership Institute, *Paying for Good for All* (2022), www.pwc.com/gx/en/services/paying-for-good-for-all/Paying-for-good-for-all.pdf.

PSF, Platform on Sustainable Finance, *Final Report on Social Taxonomy: Platform on Sustainable Finance* (February 2022), https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/280222-sustainable-finance-platform-finance-report-social-taxonomy.pdf.

Ryan, Harley E. Jr & Roy A. Wiggins III, 'The Influence of Firm- and Manager-Specific Characteristics on the Structure of Executive Compensation' (2001) 7 *Journal of Corporate Finance* 101.

Sánchez-Marín, Gregorio, María Encarnación Lucas-Pérez, Samuel Baixauli-Soler, Brian G.M. Main, Antonio Mínguez-Vera, 'Excess Executive Compensation and Corporate Governance in the United Kingdom and Spain: A Comparative Analysis' (2022) 43 *Managerial and Decision Economics* 2817.

Sarbanes-Oxley Act, Sarbanes-Oxley Act of 2002, Pub. L. 107-204, 116 Stat. 745.

SEC, Securities and Exchange Commission, *SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors*, Press Release (21 March 2022), www.sec.gov/news/press-release/2022-46.

Stobbe, Antje & Harlan Zimmerman, 'Ahead of the Curve: Tie Executive Pay to Climate Targets', IPE Magazine, June 2022, www.ipe.com/esg/ahead-of-the-curve-tie-executive-pay-to-climate-targets/10060184.article.

Sullivan, Kristen & Maureen Bujno, 'Incorporating ESG Measures into Executive Compensation Plans', Harvard Law School Forum on Corporate Governance, 24 May 2021.

Summerhayes, Geoff, 'Australia's New Horizon: Climate Change Challenges and Prudential Risk', speech, *Insurance Council of Australian Annual Forum* (Sydney, 17 February 2017).

Testa, Francesco Ivan Miroshnychenko, Roberto Barontini & Marco Frey, 'Does it Pay to be a Greenwasher or a Brownwasher?' (2018) 27 *Business Strategy and the Environment* 1104.

The Economist, 'Fat Cats Feeding', *The Economist*, 9 October 2003.

The Global Compact, *Who Cares Wins: Connecting Financial Markets to a Changing World* (2004), .
www.unepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf.

Thomas, Randall S., 'Explaining the International CEO Pay Gap: Board Capture or Market Driven?' (2004) 57 *Vanderbilt Law Review* 1171.

Thomas, Randall S. & Harwell Wells, 'Executive Compensation in the Courts: Board Capture, Optimal Contracting and Officers' Fiduciary Duties' (2011) 95 *Minnesota Law Review* 846.

Thomas, Randall S. & Christoph van der Elst, 'Say on Pay Around the World' (2015) 92 *Washington University Law Review* 653.

Trade and Industry Committee (2002-03 HC 914), *Rewards for Failure*, https://publications.parliament.uk/pa/cm200203/cmselect/cmtrdind/914/914.pdf.

Travers Smith, 'EU Platform on Sustainable Finance: Final Report on Social Taxonomy' (4 March 2022), www.traverssmith.com/knowledge/knowledge-container/eu-platform-on-sustainable-finance-final-report-on-a-social-taxonomy/.

UN Global Compact, *The World's Largest Corporate Sustainability Initiative*, www.unglobalcompact.org/what-is-gc.

UN, United Nations, *Secretary-General Proposes Global Compact on Human Rights, Labour, Environment, in Address to World Economic Forum in Davos*, Press Release (1 February 1999), www.un.org/press/en/1999/19990201.sgsm6881.html.

UN, United Nations, *Executive Summary and Conclusion of High-Level Meeting on Global Compact*, Press Release (27 July 2000), www.un.org/press/en/2000/20000727.sg2065.doc.html.

Walker, David, *A Review of Corporate Governance in UK Banks and Other Financial Industry Entities* (16 July 2009), www.iod.com/app/uploads/2022/02/The-Walker-Review-A-review-of-corporate-governance-in-UK-banks-and-other-financial-industry-entities-7c12bf7b56071cb103fdd7c0a84f28d9.pdf.

Wattles, Jackie, Ben Geier, Matt Egan & Danielle Wiener-Bronner, 'Wells Fargo's 20-Month Nightmare', CNN Business, 24 April 2018.

Winter, Jaap, 'Corporate Governance Going Astray: Executive Remuneration Built to Fail', in in Randall S. Thomas & Jennifer G. Hill (eds.), *Research Handbook on Executive Pay* (Cheltenham, UK: Edward Elgar Publishing Ltd, 2012), 199.

World Bank, Worldwide Governance Indicators, https://info.worldbank.org/governance/wgi.

Worldfavor, 'What Is the EU Taxonomy?', https://blog.worldfavor.com/what-is-the-eu-taxonomy.

Yablon, Charles M., 'Bonus Questions – Executive Compensation in the Era of Pay for Performance' (1999) 75 *Notre Dame Law Review* 271.

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