Beyond ESG: Executive Pay Metrics and Shareholder Support

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Using a novel global dataset, we show that ESG and other compensation metrics are aimed at securing shareholder consent rather than directing managerial effort. ESG metrics are often added in areas of existing strength, with negligible impact on overall ESG outcomes. Instead, metrics of any type are added after high say-on-pay dissent and are often chosen to align with proxy advisors' preferences. Using quasi-random variation in metric usage across ISS marginal peers and non-peers, we show that pay metrics increase say-on-pay approval and reduce both shareholder proposals and shareholder dissent on managerial proposals, without affecting a firm's information environment.

Keywords. Executive compensation, ESG metrics, CEO incentives, Shareholder voting, shareholder and management proposals; ISS peers

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The use of performance metrics in executive compensation has grown dramatically in recent years, particularly metrics tied to environmental, social, and governance (ESG) objectives. Standard contract theory suggests that boards use performance metrics to direct managerial attention toward specific objectives that might otherwise be neglected (Holmstrom and Milgrom, 1991). Yet this surge in metrics coincides with shareholders increasingly using voice mechanisms – say-on-pay votes and shareholder proposals – to express dissent and influence corporate policies (He, Kahraman, and Lowry, 2023; Michaely, Ordonez-Calafi, and Rubio, 2024; Aggarwal, Briscoe-Tran, Erel, and Starks, 2025). Proxy advisors such as ISS have become key intermediaries in this process, as their recommendations significantly affect voting outcomes (Malenko and Shen, 2016). Boards that care about achieving high shareholder support may therefore design compensation contracts with an eye toward gaining approval from these gatekeepers. Given these developments, we ask whether compensation metrics serve a purpose beyond directing managerial effort – such as building shareholder consensus and reducing interference with corporate strategy.

To explore this question, we construct a unique dataset with unprecedented coverage of global firms and their detailed compensation metrics, including environmental, social, and governance (ESG) metrics, financial metrics, and operating metrics. We classify ESG metrics using the Sustainability Accounting Standards Board (SASB) materiality map. Just as importantly, we relate firms' ESG metrics to news-based measures of firm performance along each of the SASB ESG dimensions, capturing the views of independent analysts, advocacy groups, government regulators, and media sources. Our dataset helps us understand how particular ESG metrics are selected and how they complement other metrics, enabling us to draw novel conclusions about their purpose and impact.

We find that companies with E&S metrics also disclose market, financial, and operational performance metrics. Boards routinely tie executive compensation to various operational targets, such as sales expansion, cost reduction, efficiency, project completion, or capital structure, which extend beyond stock returns and profits. Additionally, firms that disclose more metrics also grant their executives higher equity-based compensation, which is considered vital for aligning managerial incentives with shareholder interests.

However, companies' use of ESG and other metrics is not always consistent with contract theory. For instance, while firms tend to introduce new metrics after experiencing poor E&S performance, we observe that executive contracts emphasize E&S metrics in areas where companies have recently performed well. This suggests that these metrics are not chosen to direct CEOs towards neglected objectives deemed important by the board (Holmstrom and Milgrom, 1991). Furthermore, both total and variable compensation are linked to superior E&S performance, even in firms without explicit E&S targets. Importantly, performing well on the E&S metrics explicitly included in the contract results in only a marginal increase in total compensation. Similar patterns are observed for operating and earnings metrics.

Overall, these findings suggest that ESG metrics are similar to other metrics and that the use of all metric types should be studied jointly. Importantly, the fact that firms select metrics in areas of existing strength – rather than to address neglected objectives – is difficult to reconcile with standard contract theory (Holmstrom and Milgrom, 1991). We conjecture that the surge in compensation metrics is instead partially explained by institutional investors' and proxy advisors' increasing influence on executive compensation, which has led to greater uniformity and complexity in executive compensation contracts (Albuquerque et al, 2025; Cabezon, 2025; Jochem et al., 2025). Companies may thus introduce more metrics to explain their corporate strategies and

appease shareholders. Consistent with this conjecture, we find that compensation metrics are introduced after periods of high dissent on say-on-pay votes.

Furthermore, firms are more likely to choose the same metrics as those of firms that proxy advisors designate as their peers. To reach this conclusion, we use the Institutional Shareholder Services (ISS) algorithm to select peer companies, which serve as the basis for ISS's recommendations on say-on-pay votes (Jochem et al., 2025). While firms in the same industry may optimally choose similar metrics for fundamental reasons, we exploit the fact that, depending on the focal firm's industry and size, the ISS's algorithm includes some marginal firms as peers and excludes others that are similar. Firms that are just included as peers and those that are just excluded are very similar, yet we observe that the marginal peers' metrics have a larger effect on the firm's propensity to introduce new metrics of any type. This suggests that compensation metrics are adopted not only for optimal contracting reasons reflecting firm-specific fundamentals, but also to conform to the practices of ISS-designated peers.

We explore whether all metrics, and E&S metrics in particular, help firms gain shareholder support for the level and structure of CEO compensation and reduce shareholder interference in corporate strategy matters. To address the concern that compensation metrics are optimally chosen and that firms with stronger shareholder alignment may both enjoy more shareholder consensus and choose to provide more detailed compensation disclosures, we exploit variation in a firm's metric usage due to marginal ISS peers – firms that just meet ISS's selection criteria for peer status. Because marginal peers and marginal non-peers – firms that narrowly miss the cutoff – are virtually identical in industry and size, controlling for marginal non-peers' metric usage absorbs variation driven by fundamentals. Our instrument thus isolates variation that is more plausibly

attributable to ISS peer designation itself, rather than to industry and size similarity, allowing us to explore the effects of compensation metrics on shareholder consensus and ESG performance.

We find that firms with more metrics have higher support on their say-on-pay votes, and this effect is not limited to ESG metrics. We also show that the consensus-building effects associated with disclosing compensation metrics of any type extend beyond compensation-related matters. Firms with more compensation metrics experience less dissent on managerial proposals and lower shareholder interference as captured by fewer ESG and other proposals (Aggarwal et al., 2025).

While shareholders are appeased by ESG metrics and submit fewer ESG proposals, we find limited effects on firms' ESG performance. Even if an ESG metric is associated with better performance along the selected objective, it does not lead to better overall E&S performance. The conclusion that the main effect of compensation metrics is to gain shareholder support is also evidenced by the finding that the effects of metric usage on voting outcomes and shareholder proposals are even stronger when we instrument a firm's metric usage with that of its marginal ISS peers, suggesting that metrics leading to favorable recommendations by ISS play a particularly important role in driving shareholder consent. Importantly, we find no evidence that disclosing more metrics improves a firm's information environment by communicating the corporate strategy to shareholders more effectively, as metric disclosures do not appear to be associated with higher stock liquidity or more precise analysts' forecasts.

We contribute to the extensive literature on executive compensation (see Edmans, Gabaix, and Jenter (2017) and Edmans, Gosling, and Jenter (2023) for recent reviews). A more recent and growing strand of this literature examines ESG targets in managerial contracts and finds mixed results on whether ESG-linked pay is associated with future ESG performance (Bebchuk and

Tallarita, 2022; Homroy, Mavruk, and Nguyen, 2023; Cohen, Kadach, Ormazabal, and Reichelstein, 2023; Ikram, Li, and Minor, 2023; Hazarika et al., 2022; Flammer, Hong, and Minor, 2019; Maas, 2018; Michaely, Schmid, and Wang, 2024; Efing et al., 2024). Qin and Yang (2022) show that turnover is less sensitive to financial performance in companies with ESG pay. These papers focus on whether ESG metrics affect managerial behavior or firm outcomes, implicitly assuming that metrics are chosen to direct managerial effort – consistent with standard contract theory. Our contribution is to challenge this assumption. We show that compensation metrics – ESG and other metrics – may serve a fundamentally different purpose: building shareholder consensus. By examining all metrics jointly, we demonstrate that ESG metrics are not unique but rather part of a broader pattern in which firms use compensation disclosures to appease shareholders and reduce interference with corporate strategy.

By highlighting that ESG metrics are merely a subset of the multitude of metrics disclosed to shareholders, we also contribute to the broader literature on executive compensation. This literature has largely neglected the use of diverse metrics and focused instead on CEOs' end-of-year equity, stock options, and bonus awards when studying CEO compensation. Notable exceptions include Ittner, Larker, and Rajan (1997), who find that companies with more innovative strategies and those in regulated industries tend to employ more non-financial performance measures in CEO bonus contracts. Additionally, De Angelis and Grinstein (2015) study the use of pre-specified metrics in performance-based awards. These papers find that firms choose metrics that are more informative about performance, as predicted by contract theory. However, they were written well before the emergence of interest in sustainability and do not consider the effects of compensation metrics on shareholder consensus. In contrast, our sample covers a period in which pay disclosure mandates were implemented across jurisdictions, leading to convergence in CEO

pay levels (Albuquerque et al., 2025; Cabezon, 2025; Jochem et al., 2025). Our findings suggest that the role of metrics extends beyond providing informative signals about performance – firms adopt metrics similar to those of their ISS-designated peers in order to build shareholder consensus.

1. Data

1.1 Compensation Data and Metrics Classification

We obtain compensation data for international listed companies from Executive Compensation Analytics (ECA), a dataset provided by Institutional Shareholder Services (ISS). The data include information on salaries, bonuses, equity awards, stock options, and other forms of remuneration. We focus on CEO compensation contracts because contracts for multiple top executives are available in very few instances. Our sample includes 10,636 unique firms across 34 countries from 2011 to 2021, with coverage increasing over time. Notably, nearly half of the firms are from outside the U.S.

Crucially for our study, the data provide detailed textual information on the performance metrics used to determine CEOs' final remuneration.[1] Appendix B presents examples of disclosed metrics from executive compensation contracts and illustrates how we use the dictionary in Table IA.D to classify these metrics. We manually review metrics with complex or ambiguous keyword combinations to improve accuracy. While other studies use the same data source (notably Cohen et al, 2023), we combine textual analysis and manual review to achieve an exceptionally detailed classification. In this way, we obtain a more nuanced analysis of compensation contracts than

[1] Another ISS dataset – Incentive Lab – is frequently used to investigate executive compensation. Compared to the ECA data we use, Incentive Lab suffers from two disadvantages: limited company coverage (only up to 16% of the coverage of ECA) and limited data on metric categories, especially before 2018, when Incentive Lab collected only three broad categories: accounting, stock price, and other. The latter category included both operating and ESG metrics. Even after 2018, Incentive Lab distinguishes only a handful of E&S metrics, which would not allow us to investigate compensation metrics and their materiality to the level of detail we achieve with textual analysis.

previous studies, which typically rely on coarse ESG metric groupings and neglect other compensation metrics. Furthermore, we classify *all* metrics disclosed in compensation contracts, not merely ESG metrics, into 31 distinct categories, each reflecting a unique aspect of executive performance evaluation.

We do not collect information on whether the metrics are qualitative or quantitative or on the proportion of compensation tied to the metrics, because the mere presence of an objective could affect managerial behavior. Moreover, qualitative metrics may be optimal when volatile performance makes executive efforts harder to evaluate, even if they are more easily manipulated (Ikram et al., 2023; Michaely et al., 2024). We also do not collect information on whether these metrics are related to short- or long-term performance measures, as ESG compensation metrics are predominantly linked to short-term targets, which allows investors to assess tangible progress towards more sustainable policies on a timely basis.[2]

We organize the metrics into four broad dimensions: *Earnings*, *Market*, *Operating*, and *ESG*. Earnings metrics encompass two categories: *Profitability* and *Cashflow*. *Profitability*, in turn, includes returns on assets and net income, while *Cashflow* includes operating cashflow. In contrast, market metrics are directly linked to shareholder returns and incorporate indicators related to share price performance.

The set of operating metrics includes those related to a company's business operations, organized into five key areas: *capital structure, efficiency, investment, sales*, and *other. Efficiency metrics* address aspects such as operating expenditures and asset turnover, while the category *'Other'* encompasses metrics like customer satisfaction and the successful completion of specific strategic projects.

[2] See, for example, https://corpgov.law.harvard.edu/2022/06/25/paying-well-by-paying-for-good/ or https://www.ipe.com/investment/ahead-of-the-curve-tie-executive-pay-to-climate-targets/10060184.article.

Crucially, we use the Sustainability Accounting Standards Board (SASB) classification to categorize the ESG metrics.[3] The SASB classification includes five broad dimensions of sustainability: Environmental, Social Capital, Human Capital, Business Model and Innovation, and Leadership and Governance. Each dimension contains several specific categories, providing a comprehensive framework for assessing a company's performance in these areas. For example, the Environmental dimension covers six topics: GHG Emissions, Air Quality, Energy Management, Water and Wastewater Management, Waste and Hazardous Materials Management, and Ecological Impacts.

While the original SASB classification includes 26 categories, not all ESG metrics in the executive contracts contain the level of detail necessary for classification within these specific categories. For approximately 2% of the firm-year observations the description of the ESG metric lacks sufficient specificity for precise classification. In these cases, we assign the metric to one of five broader dimensions: Environmental, Social Capital, Human Capital, Business Model and Innovation, or Leadership and Governance, or we simply categorize it as ESG. Additionally, metrics with a clear sustainability focus that do not directly align with the SASB categories, such as those related to sustainability reporting or general ESG ratings, are also grouped within the general ESG category.[4] Furthermore, due to the overlap between specific SASB categories and the broad nature of some disclosed metrics, we merge the following categories: Customer Privacy with Data Security, and Product Quality and Safety with Customer Welfare. Consequently, our classification comprises 24 specific ESG metrics.

[3] The SASB is an independent, nonprofit organization that focuses on enhancing the quality and comparability of sustainability disclosures in financial reporting.

[4] Thus, a metric aimed at limiting the firm's environmental impact would fall under the Environmental category, while "Corporate Social Responsibility" would be classified as ESG.

Importantly, recognizing that firms across industries face distinct sustainability-related risks and opportunities, SASB has developed a *Materiality Map* that assesses the relevance (or materiality) of individual ESG metrics for the performance and risks faced by firms in different industries, as defined according to SASB's Sustainable Industry Classification System (SICS). Specifically, companies are grouped into 77 industries based on their primary business activities and the most relevant ESG challenges they face. We utilize the SASB Materiality Map to assess the relevance of ESG metrics in executive compensation contracts.

1.2 Firm-Level ESG Performance

We assess a firm's ESG performance using data from FactSet TruValue Labs (TruValue), an artificial intelligence (AI)/Big Data company that provides daily updates on companies' ESG performance. Specifically, TruValue utilizes AI to process unstructured data from over 200,000 vetted sources, excluding companies' self-reported information. Therefore, unlike ESG scores provided by other data companies that rely on firms' disclosed information, TruValue extracts big data to capture insights from analysts, advocacy groups, government regulators, and other sources published by independent media. Unlike ESG ratings, it also avoids the disadvantage of being directly affected by ESG compensation.

TruValue algorithms identify ESG issues, quantify the sentiment in the language, and then produce indicators that allow for the measurement of a company's recent ESG performance as well as its ranking relative to industry peers. Importantly, in addition to evaluating a firm's overall ESG performance, TruValue produces separate scores of a company's recent performance according to all individual dimensions highlighted in the SASB materiality framework.

Consequently, we can track not only overall scores but also annual changes in ESG performance broken down by the 26 SASB categories.

In our analysis, we utilize a company's ESG score, which ranks the company relative to its industry peers across all ESG dimensions. In addition, we use firms' *Pulse Scores*, which measure performance changes that highlight a company's performance according to each of the SASB categories, as well as its overall performance.[5]

The Pulse Scores are updated daily and are produced by applying a running-sum-average formulation to a continuous time stream of NLP-generated assessments related to the category (or any category, in the case of overall measures), with more recent events weighted more significantly (exponentially decaying with a 14-day half-life). Since executive compensation varies annually, in our analysis, we consider the maximum of a firm's *Pulse Scores* in individual SASB categories or overall. We also consider the minimum Pulse Score in each SASB category to identify the effect of ESG incidents on metric choices.

Finally, we validate our results on firms' overall ESG performance by using changes in their combined ESG scores obtained from LSEG (formerly Refinitiv).

1.3 Other Data Sources

We employ various other data sources. First, we obtain firms' financial information, including stock returns, prices, profitability, and other accounting information, from Datastream and Worldscope. Second, we use FactSet Ownership data to measure firms' institutional ownership and construct proxies for the presence of institutional and non-institutional blockholders.

[5] We average the Pulse Scores of the two SASB ESG categories we merge in the compensation contracts.

Third, we use ISS Voting Analytics to measure shareholder support for executive compensation and other management proposals, as well as the extent to which shareholders, by submitting proposals, interfere with corporate strategy, potentially wasting managerial time. We also consider the frequency of shareholder-sponsored ESG proposals to evaluate the extent to which firms' emphasis on ESG performance in compensation contracts can be viewed as a substitute for shareholders' initiatives on corporate sustainability.

Finally, we use data from IBES to measure analysts' consensus forecast dispersion, forecast accuracy, and standardized unexpected earnings.

Appendix A provides detailed definitions of all variables used in the analysis, while Table 1 reports summary statistics for the main variables.

2. Descriptive Evidence on Compensation Metrics Usage

Panel A of Figure 1 shows the proportion of firms in the ECA dataset that report at least one pay metric, as well as those using ESG and other types of metrics. Previous literature has already highlighted the rise of ESG metrics (e.g., Cohen, Kadach, Ormazabal, and Reichelstein, 2023), which are reported by almost 40% of the firms by the end of the sample period. Our findings reveal a broader and largely overlooked phenomenon: over 80% of companies report at least one compensation metric during the sample period, and this proportion remains stable. This widespread pattern extends beyond market metrics, which are typically tied to stock options and other forms of equity-based compensation. The most common metrics are earnings and operating metrics, which have become much more prevalent, along with ESG metrics.

Panel B presents trends in ESG metrics for US and global companies, distinguishing between European firms and those in regions outside the US and Europe. Similar patterns exist

internationally, despite the lower prevalence of ESG metrics in the US. The differences between the US and Europe largely reflect differences in sample composition, as our sample includes a higher proportion of smaller US companies. The usage of ESG metrics is comparable when we split the samples into firms with market capitalization above and below the median. As shown in Figure IA.1, the largest firms use more ESG metrics.[6] Overall, this similarity among global companies is unsurprising because the largest companies are held by the same institutional blockholders.

Figure 2 shows that half of the ESG metrics can be classified as material according to the SASB materiality map. The proportion of material ESG metrics has remained constant as the propensity to use ESG metrics has increased, with a small but increasing fraction of ESG metrics that cannot be classified according to the SASB objectives. Figure 3 illustrates how firms' inclination to consider different types of ESG metrics has evolved over time. It appears that the explosion in the use of ESG metrics has been driven by the SASB category of Employee Health and Safety, particularly Employee Engagement, Diversity, and Inclusion. The sharp increase in diversity and inclusion targets coincides with the rise in board gender diversity, which in turn has been driven by several factors: increased public attention to gender equality (Giannetti and Wang, 2023), introduction of board gender quotas in several countries[7] (Ferrari et al, 2022; Ferreira et al, 2020), and campaigns initiated by major institutional investors in 2017 to promote gender diversity at the board level (Gormley et al, 2023). This suggests that the push for gender equality at the top is correlated with similar efforts to foster inclusivity across lower organizational ranks.

Figure 4 examines the use of various operating metrics that have experienced a modest increase during the sample period. The increased frequency of operating metrics is attributed to

[6] Figure IA.2 shows that ESG metrics are rarely dropped during our sample period.
[7] For instance, Italy and France adopted a gender quota in 2011 and Germany in 2015.

the category *'Other'*, which encompasses specific metrics such as the completion of individual projects and may suggest a growing effort by boards and compensation committees to provide clearer explanations and rationales for executive pay decisions.

3. Which Firms Use Compensation Metrics?

3.1 ESG Metrics and Other Features of Compensation Contracts

We begin by examining the relationship between the presence of ESG metrics and other features of the compensation contract. This analysis will help us understand whether environmental and social objectives crowd out financial performance – specifically, whether ESG metrics serve as a substitute for financial performance metrics. Panel A of Table 2 indicates that companies using ESG metrics also tend to employ operating, earnings, and market metrics, suggesting that ESG metrics are similar to other performance metrics. This is true for both ESG metrics and material ESG metrics, even though the correlations are somewhat smaller for the latter. Furthermore, the correlations remain largely invariant when we introduce firm fixed effects, even though our sample is largely unbalanced and expands over time, suggesting that firms introduce new metrics of different types simultaneously.

We also consider whether contracts with metrics exhibit features that are typically associated with shareholder value maximization, such as equity-based compensation. Panel B examines the relationship between the number of metric types included in a contract and the ratio of equity-based compensation to total compensation. We conduct these tests, both including and excluding market-based metrics in alternative specifications, since stock options and equity awards typically depend on market performance targets. All models show a positive correlation between the use of compensation metrics and equity-based compensation, suggesting that compensation

metrics complement the broader objectives of shareholder value and market performance in determining CEO compensation. Furthermore, the correlation is positive and significant even after controlling for firm fixed effects, indicating that ESG objectives are introduced concurrently with equity-based compensation awards.

The effects are not only statistically significant but also economically significant. Column 1 reveals that a one-standard-deviation increase in the share of equity in CEO compensation is associated with an increase of approximately 0.26 in the number of metric types used. Considering that the average firm uses just over two types of metrics, this represents a substantial 12.47% increase relative to the sample mean.

3.2 ESG Metrics Use and Firm Characteristics

To gauge the role of metrics in executive contracts and how firms select these metrics, we examine the relationship between the probability that a firm uses a specific metric type and several firm characteristics, including firm ownership structure and proxies for the informativeness of different measures of firm performance.

Table 3 examines the relationship between firm characteristics and ESG metric usage, considering all ESG metrics (columns 1 and 2) and material ESG metrics (columns 3 and 4). In odd-numbered columns, we include industry, year, and country fixed effects, whereas in even-numbered columns, we consider firm and year fixed effects. Since our sample is highly unbalanced, the cross-sectional variation in the specifications with industry and year fixed effects provides more insightful evidence. The statistically weaker effects in the regressions with firm fixed effects suggest that most characteristics vary little over time, and that the determinants of compensation metrics uncovered in this part of the analysis are largely cross-sectional.

While institutional ownership does not seem to matter per se, companies with non-institutional blockholders are generally less inclined to use ESG metrics. The effects of non-institutional block ownership are highly economically significant. Based on column 1, the presence of a non-institutional blockholder is associated with about 21% lower likelihood of using ESG metrics. To the extent that non-institutional blockholders guarantee more stable ownership, these findings suggest that ESG metrics are more likely to be used in companies with contestable control and more active external monitors, who may exit or voice dissent.

Additionally, consistent with Holmström (1979), firms with volatile market performance, captured by the volatility of daily returns, measured as in Coles, Daniel, and Naveen (2006) and Bettis, Bizjak, Coles, and Kalpathy (2018), are more likely to adopt ESG metrics in the specifications without firm fixed effects, when the estimates exploit cross-sectional variation. This suggests that when traditional financial indicators are less reliable, boards focus more on non-financial performance through ESG metrics. However, when we include firm fixed effects, the coefficient of this variable is reversed, suggesting that firms do not introduce ESG metrics after periods of high return volatility. Furthermore, the volatility of profits does not seem to matter; if anything, companies with volatile profits tend to use fewer material ESG metrics. Additionally, higher volatility in the tone of ESG news coverage is positively associated with the adoption of ESG metrics, potentially because companies can mitigate its consequences by selecting appropriate ESG objectives and specific metrics.

To further evaluate the importance of the information environment in the selection of ESG metrics, we consider the tenure of the CEO. Pan, Wang, and Weisbach (2015) highlight that information asymmetry about CEOs' strategies and abilities is highest immediately after appointment. As CEO tenure increases, boards and the market become more familiar with the

CEO's abilities and corporate priorities. To the extent that there is less uncertainty, these firms may be subject to less scrutiny, potentially reducing the need to disclose as many metrics as their CEOs' tenure increases. Consistent with this conjecture, CEO tenure is negatively associated with the use of ESG metrics, although the economic impact is modest.

Interestingly, a company's ESG performance rank is not correlated with the use of ESG metrics. Additionally, we observe that larger companies tend to use more compensation metrics. This is consistent with the fact that large firms have more complex compensation contracts but may also suggest that a company's visibility is associated with the use of more metrics.

Columns 3 and 4 indicate that the factors influencing the use of material ESG metrics are similar to those for general ESG metrics. Furthermore, the determinants of ESG metric use appear largely invariant in Panel B, where we distinguish between environmental, social, and governance metrics, despite having less statistical power in some instances. Thus, for conciseness, most of our subsequent tests do not distinguish between ESG metrics.

3.3 The Choice of Specific ESG Metrics

We also explore how specific ESG metrics are chosen. Our granular measures of a firm's performance, according to specific ESG metrics, enable us to test whether boards attempt to direct managerial efforts towards neglected and hard-to-achieve objectives, as multitasking models would imply.

We construct a metric-level dataset and investigate how firms select which specific ESG metrics to include based on their overall ESG performance and performance along each specific ESG metric. This dataset contains one observation for each firm-year-metric combination, covering all SASB ESG metric categories. The dependent variable is an indicator equal to one if

the firm introduces a specific metric for the first time in a given year, and zero otherwise. Since we have many observations per firm per year, we include firm fixed effects, which hold constant a firm's propensity to use any type of metric. As a result, slow-moving firm-level characteristics, such as ownership, lose significance.

Table 4 relates the introduction of specific ESG metrics to the sentiment of a firm's ESG news coverage during the previous year. Two interesting findings emerge: ESG metrics are more likely to be introduced when a firm's overall ESG performance is negative. However, firms tend to tie executive compensation to specific ESG metrics along dimensions that received more positive news coverage in the previous year. A one-standard-deviation increase in the metric-specific ESG news corresponds to a 0.39 percentage point increase in the probability that a firm will introduce a given metric (column 1). This represents a meaningful 65% increase relative to the unconditional probability of 0.6%. A one-standard-deviation increase in overall ESG news sentiment, by contrast, is associated with a 0.08 percentage point decrease in the probability of ESG metric introduction. This finding is robust when we focus on the introduction of material metrics (column 4).

In column 2, firms appear to select metrics that are material; however, firms that rank poorly in terms of their ESG performance are not more likely than other firms to select material ESG metrics.

In column 3, we also consider whether firms are more likely to introduce a specific ESG metric after experiencing particularly bad performance on that dimension or in their overall ESG performance. We capture this by considering the minimum of the Pulse Score specific to a metric, which we define as *Bad Metric-Specific News*, and proceed in the same way for general news to define *Bad All Categories Pulse News*. The coefficient on *Bad Metric-Specific News* is negative

and significant, suggesting that such news is associated with a lower likelihood of introducing a specific ESG metric. Thus, firms do not introduce specific ESG metrics in response to ESG accidents. The effect is not only statistically significant but also economically significant. A one-standard-deviation increase in *Bad Metric-Specific News* is associated with a 0.07 percentage point decrease in the likelihood of introducing a given ESG metric. This effect is meaningful relative to the unconditional probability of 0.6%, representing approximately a 12% decrease. This suggests that positive news sentiment about a firm's performance influences the inclusion of individual ESG metrics in compensation contracts. In addition, *Bad All Categories Pulse News* is not statistically significant.

In columns 5 to 7, our conclusion that firms introduce metrics in which they have already experienced performance improvements is invariant when we distinguish between environmental, social, and governance metrics, even though environmental metrics tend to be introduced irrespective of the firm's overall ESG performance.

3.4 Operating, Earnings, and Market Metrics

Table IA.1 examines the selection process for non-ESG metrics. We find that the same firm characteristics that predict the use of ESG metrics also shape the adoption of operating, earnings, and market metrics. In particular, firms with institutional blockholders and greater uncertainty – as proxied by shorter CEO tenure and higher volatility in ESG-related sentiment – are more likely to rely on multiple performance metrics, consistent with a broader need to justify CEO compensation

In line with contract theory, companies with lower profit volatility are more likely to use earnings metrics. More surprisingly, return volatility also reduces the use of earnings metrics –

and of any metric type in specifications with firm fixed effects – suggesting that firms may not want to reveal clear benchmarks when they face more uncertainty.

Panel B of Table IA.1 examines individual operating and earnings metrics to assess the conditions under which companies use them. Companies that lag behind their industry peers in terms of cashflows (column 1) or sales (column 3) tend to use more cashflow- or sales-based metrics, respectively. While these findings are consistent with multitasking models, companies with high industry-adjusted profitability (column 2) use more profitability-based measures, suggesting that metrics do not necessarily serve the objective of directing managerial efforts towards tasks with poor past performance. This is consistent with our findings on the choice of specific ESG metrics in Table 4.

Finally, boards do not necessarily select metrics with lower volatility. Only the volatilities of industry-adjusted cashflow and industry-adjusted profitability are negatively related to the use of cashflow based metrics. Volatility appears to matter less for outcomes that are more closely connected to managerial actions, such as sales and fixed investment.

4. Consequences of Compensation Metrics on Actual Pay

We explore whether companies with ESG metrics compensate their executives more for good ESG performance than other companies do. We measure ESG performance using the sentiment of TruValue news over the previous year. Specifically, we examine the extent to which executive compensation at firms with particularly strong recent performance increases, and how the inclusion of ESG metrics affects pay sensitivity to ESG and other performance measures.

To test whether ESG metrics matter, we define a new variable, *Metric News*, that considers only the sum of the TruValue news associated with the specific metrics incorporated in the

compensation contract. We also consider the extent to which compensation depends on news that is viewed as material for a given firm.

In Table 5, we find that total compensation and variable compensation, which includes bonuses, restricted stock grants, and option awards in column 2 and restricted stock grants and stock options in column 3, increase with ESG performance. Specifically, a one-standard-deviation improvement in ESG performance is associated with a 5.58% increase in CEO total compensation, as indicated in column 1.[8] Similarly, column 3 suggests that the same improvement is associated with an 8.60% increase in option awards and restricted stock grants. Metric-specific news – news about the specific ESG metrics explicitly included in the CEO's compensation contract – is positively related only to total compensation, but has a relatively small additional effect, with an increase of 1.61% in total compensation. This suggests that CEOs are compensated for good overall ESG performance, regardless of whether their contracts include ESG metrics or the targets they achieve. Furthermore, since theoretically only variable compensation is considered behavior-inducing, while the fixed component matters for retention, the fact that metric news does not affect variable compensation suggests that metrics are not used to give high-powered incentives, but at most to show that some issues are being addressed by management.

In columns 4 to 6, we also include a variable capturing the sentiment of all material ESG news for the company. Material ESG news appears to matter for executive payouts, in addition to general ESG news, and is more relevant than the news considered in the metrics. Column 4 indicates that a one-standard-deviation increase in material ESG news is associated with a 3.30% increase in CEO total compensation. The corresponding increases for general ESG news and metric-specific ESG news are 3.24% and 1.07%, respectively.

[8] More precisely, the economic magnitude can be calculated as exp(coef*sd)-1 = exp(0.0029×18.74)-1 = 5.58%.

We also control for the four metric type dummies. Companies that use any type of metric tend to compensate their executives more, irrespective of performance, even though companies with earnings metrics tend to have lower variable compensation, defined as restricted stock, options, and bonus awards.[9] ESG metrics are also associated with an increase in compensation, which is not statistically significant in columns 2 and 5, where we consider stocks, options, and bonus awards.

In Table IA.2, the ESG metric dummy does not appear to affect CEO excess compensation, as estimated in Core, Guay, and Larcker (2008), confirming the findings of Cohen et al. (2023). Market and operating metrics are positively associated with excess compensation, while earnings metrics, if anything, have a negative effect. Overall, these findings do not support the concern that ESG metrics differ from other metrics and are used for CEO rent extraction.

Panel A of Table IA.3 introduces an interaction between ESG metrics and the firm's past returns to investigate whether ESG metrics reduce the sensitivity of compensation to financial performance. The interaction with past returns is never statistically significant and has a magnitude close to zero, supporting our earlier conclusion that ESG metrics complement, rather than substitute for, metrics based on financial targets. Similarly, in Panel B of Table IA.3, we find that the inclusion of sales, profitability, or efficiency metrics in a compensation contract raises total and variable compensation. However, the interactions of these metrics with various performance measures are always insignificant, indicating that the inclusion of sales, profitability, or efficiency metrics does not affect the sensitivity of compensation to these indicators of firm performance.

[9] The results suggest that the CEOs of companies with earnings metrics receive higher salaries and lower bonuses.

Overall, these results suggest that while a higher number of metric types is associated with higher compensation, the effect of ESG metrics is smaller or insignificant. Thus, the use of ESG metrics is unlikely to be linked to rent extraction.

More importantly, the presence of metrics does not appear to alter the sensitivity of compensation to performance. ESG performance has a positive impact on compensation across all companies, but the presence of metrics – whether ESG or other metrics – has limited effects on the sensitivity of total and variable compensation to ESG and financial performance. Instead, the correlation between more metric types and higher pay suggests that firms may use various metrics to explain high CEO pay to shareholders and market participants. In the next section, we test this novel rationale for why metrics are used in executive contracts.

5. The Effects of Compensation Metrics

So far, we have shown that compensation metrics share similar determinants and have limited effects on CEO compensation, suggesting that their main goal may not be to influence managerial actions. However, we recognize that the mere inclusion of pay metrics involves a strategic discussion between the board and management, which can shape managerial priorities regardless of actual payouts. Therefore, it is important to consider how ESG metrics affect a firm's ESG performance and, more broadly, how all compensation metrics influence shareholder consensus.

Since compensation is optimally chosen, it is challenging to go beyond mere associations between contract features and firm outcomes. Firms that use more compensation metrics may differ systematically from other firms in ways that also affect shareholder consensus and ESG performance, raising concerns about omitted-variable bias. Reverse causality is also possible if

firms anticipate shareholder reactions when designing compensation contracts. Besides providing suggestive evidence on firms' ESG performance after the introduction of ESG metrics, we leverage the fact that the widespread use of compensation metrics may be driven by investors' scrutiny and the resulting higher compensation disclosure during our sample period. We begin by discussing how the institutional environment facilitates the construction of an instrument for compensation metric usage, which generates variation in metric adoption that is plausibly unrelated to the focal firm's fundamentals once we appropriately control for industry and size. This approach enables us to draw more credible inferences about the causal effects of compensation metrics on firm ESG performance and shareholder relations.

5.1 Proxy Advisors' Practices and ESG Metrics

Many countries around the world have introduced shareholder votes on executive compensation, spurred by criticism of increasing levels of CEO compensation. The so-called say-on-pay has been compulsory in the UK since 2002 and in the US since 2011, following the enactment of the Dodd-Frank Act. Shareholders vote on the actual executive remuneration or compensation policy, and their vote may be advisory or binding, depending on the jurisdiction. Irrespective of the specific implementation, institutional investors typically rely on the advice of proxy advisory firms, such as ISS, which has been shown to impact voting outcomes (Malenko and Shen, 2016). Since boards, for reputational reasons, care about achieving high shareholder support, directors may aim to choose features of the compensation contract that are likely to meet the approval of ISS.

Since 2011, ISS has disclosed the methodology it uses to identify a firm's peers and provide recommendations on compensation packages (ISS, 2012). Jochem et al. (2025) show that the ISS

peer benchmarking methodology positively affects the probability that a potential firm is included in the focal firm's disclosed peer group and that the size cutoff used by ISS matters.

We conjecture that the ISS benchmarking methodology may also affect the focal firm's choice of metrics. To construct an instrument, we follow the algorithm to identify ISS peers as described by Jochem et al. (2025). Specifically, ISS considers companies in the same two-digit GICS industry that are similar in terms of sales and market capitalization to the focal firm. Importantly, ISS restricts the peer group to companies that are between 0.45 and 2.1 times the focal company's annual sales and have a market capitalization between 0.2 and 5 times the focal company's market capitalization. ISS then identifies up to 24 peers for each company, narrowing down the industry classification to up to six digits as long as there are at least 14 peers. Thus, if there are fewer than 14 peers in the same six-digit industry of the focal firm, ISS broadens the search to include firms in a coarser industry classification. Since ISS ranks potential peers based on their absolute distance in sales from the focal firm, a firm's marginal peers are those ranked closest to the selection threshold. The marginal non-peers are those firms that just miss the selection cutoff using the ISS algorithm. In our subsequent tests, we consider five marginal peers and non-peers.

Any correlation between a firm's metrics and those of its peers could reflect either the influence of ISS peer designation or simply the fact that similar firms make similar choices. Our identification strategy addresses this concern by comparing the effects of marginal peers – firms that just meet ISS's selection criteria – to those of marginal non-peers – firms that narrowly miss the cutoff. Because marginal peers and marginal non-peers are virtually identical in terms of industry and size (as shown in Figure IA.3), any effect of fundamentals on metric adoption should operate equally through both groups. We hypothesize that selecting metrics more closely aligned

with those of the marginal peers than with those of the marginal non-peers is therefore more likely a decision driven by the desire to gain shareholder support, rather than fundamental similarities. In our empirical specifications, we control for the metric usage of marginal non-peers, which absorbs variation driven by industry and size similarity. What remains – the differential effect of marginal peers relative to marginal non-peers – isolates the influence of ISS peer designation itself.

Supporting this conjecture, marginal peers appear to have a disproportionate impact on a firm's decision to include specific metrics compared with marginal non-peers. This is the case not only for ESG metrics but also for compensation metrics of any type. Figure 5 presents the coefficients from regressions of first-time metric adoption on the metrics used by marginal peers (firms just above the ISS peer selection threshold) versus those used by marginal non-peers (firms just below the threshold). Panel A reveals that both marginal peers and marginal non-peers influence metric adoption, with marginal peers showing substantially stronger effects. Panel B shows that the difference between marginal peer and marginal non-peer effects is positive and statistically significant for both ESG metrics and all metrics, indicating that ISS peers have a stronger impact on metric adoption than non-peers. This differential effect is central to our identification strategy: if industry and size similarity alone drove metric adoption, marginal peers and marginal non-peers – which are virtually identical in fundamentals – would have similar effects. The fact that marginal peers exert a significantly greater influence provides direct evidence that the ISS peer designation itself affects firms' metric choices, beyond what fundamentals alone would predict.

Table 6 presents multivariate evidence comparing the influence of marginal peers versus marginal non-peers on the focal firm's first-time adoption of a specific metric. To control for differences in fundamentals between marginal peers and marginal non-peers, we include the

absolute difference in the average sales of marginal peers and non-peers and its interaction with the fraction of peers that use the specific metric. In addition, we distinguish between the whole sample of firms with at least 14 peers (ISS minimum requirement) and firms with exactly 24 peers (ISS's target peer group size). In the latter group, as seen in Figure IA.3, the selected peers tend to be more similar to the marginal non-peers in terms of absolute sales difference from the focal firm. Metric usage by marginal non-peers may thus be a better control, and it may be useful to compare the estimates to assess the possible influence of omitted factors.

The focal firm is more likely to introduce a metric if that metric is used by both marginal peers and marginal non-peers, indicating that fundamentals do matter. However, the effect is significantly larger for marginal peers. For ESG metrics, in column 1, the probability of first-time adoption increases by 13.65 percentage points if marginal peers use that metric; the corresponding effect for marginal non-peers is 11.03 percentage points. The difference of 2.62 percentage points is statistically significant, providing evidence that ISS peer designation causally influences ESG metric adoption beyond what would be expected from industry similarity alone. The difference in effects between marginal peers and marginal non-peers is comparable in columns 5 and 6, where marginal peers and non-peers are more similar to each other. This greater similarity reduces concerns that firms choose metrics more similar to those of their marginal peers for fundamental reasons.

We further address this concern in columns 3-4 and 7-8 by controlling for the absolute difference in the average sales of marginal peers and non-peers. When this distance is larger, metric usage by marginal non-peers is a noisier control for fundamentals. It would be worrisome if we observed that the impact of marginal peers' metric usage is larger when the distance is larger, making non-peers a weaker control. We find, however, that the sales distance is not statistically

significant, and its interaction with peer metric usage is either insignificant or has a negative coefficient. This evidence supports our interpretation that ISS peer designation, rather than economic fundamentals, drives the observed peer effects on metric adoption.

Overall, the stronger effect of marginal peers suggests a tendency toward one-size-fits-all approaches driven by institutional investors' reliance on ISS recommendations, rather than firm-specific factors that drive the choice of particular metrics. Put differently, the higher propensity to choose metrics selected by marginal peers is unlikely to reflect optimal compensation design.

In what follows, we instrument a firm's metric usage with that of its marginal peers. Our approach differs from standard peer-based instruments that use average peer characteristics, as our identification hinges on controlling for marginal non-peers. Because marginal peers and marginal non-peers are nearly identical in industry and size – they differ only in whether they fall just inside or just outside ISS's selection threshold – the marginal non-peers' metric usage serves as a control for the effect of fundamentals. Thus, we isolate variation that is more plausibly attributable to ISS peer designation than to industry and size similarity. This approach mitigates endogeneity concerns because our instrument captures variation in metric adoption driven by proxy advisory firms' external pressure rather than the focal firm's underlying characteristics or optimal compensation design. We can thus more credibly examine whether compensation metrics have a causal impact on ESG performance, shareholder consensus, and the firm's information environment.

5.2 ESG Metrics and ESG Performance

We begin by examining how the use of ESG metrics affects ESG performance. We analyze both the effect of a metric on a firm's performance along the specific dimension it captures and the metric's influence on the firm's overall ESG performance.

Table 7 examines whether the presence of a specific ESG metric improves a firm's subsequent ESG performance along the dimension of that metric, measured by metric-specific ESG news sentiment in year *t+1*. Columns 1 and 4 report OLS regressions; the remaining columns present the instrumental variables estimates. In this analysis, we instrument for the presence of an ESG metric using the lagged fraction of marginal ISS peers that use the same metric, exploiting the quasi-random variation in peer composition around ISS's peer selection threshold.

Specifically, we use ISS marginal peers' metric usage to instrument for the focal firm's metric usage and control for the metric usage by marginal ISS non-peers. As discussed in Section 5.1, marginal ISS non-peers are virtually identical to marginal ISS peers in terms of size and industry – as the discontinuity around the selection cutoff highlighted by Jochem et al. (2025) implies – so this control absorbs variation driven by fundamentals. We also control for the absolute sales distance between marginal peers and non-peers and its interaction with our instrument (i.e., the proportion of marginal peers using the specific metric as the focal firm) to account for any remaining differences in fundamentals between marginal peers and non-peers that could drive our findings.[10] We further present estimates for the full sample of firms with at least 14 peers and for the subsample with exactly 24 peers, where heterogeneity between marginal peers and non-peers is lower.

The first-stage results (columns 2 and 5) confirm the instrument's strength, with F-statistics well above conventional thresholds for weak instruments. Marginal peers using the same metric significantly predict a firm's likelihood of having that metric. The IV estimates (columns 3 and 6) reveal that the presence of an ESG metric leads to substantial improvements in metric-specific

[10] Unlike Jochem et al. (2025), we do not examine whether the focal firm reports as a peer a firm that ISS would select according to its methodology. Hence, we cannot show discontinuity at the cutoff. Instead, we are the first to exploit ISS peer benchmarking to construct instruments for compensation metric usage.

ESG news sentiment the following year, with coefficients of 0.98 in column 3 and 0.99 in column 6, indicating improvements of almost one standard deviation in both specifications.

The OLS estimates show similar results, although the economic magnitudes are smaller, indicating that companies introducing ESG metrics face challenges in improving their ESG performance even along their preferred metrics, in which they historically performed better. Overall, these findings show that, while boards choose metrics where the company has performed well, adopting ESG metrics promotes meaningful improvements in the specific ESG targets.

Table 8 considers how the number of ESG metrics affects firms' overall ESG performance. We instrument the number of ESG metrics used by the focal firm with the number of ESG metrics used by its marginal ISS peers. We also control for the number of ESG metrics used by marginal non-peers, the absolute difference in the average sales of marginal peers and non-peers, and the interaction of the latter with the instrument. The F-statistics show that the instrument is not weak. Both the OLS and the IV estimates indicate that firms with more ESG metrics do not have better overall ESG performance. The OLS specification with firm fixed effects (column 2) shows that, if anything, firms' overall ESG performance deteriorates following the introduction of ESG metrics, suggesting that boards may introduce ESG metrics in anticipation of poor ESG performance. Results are qualitatively similar when we restrict the sample to firms with exactly 24 peers in columns 5-8. The IV estimates in column 8 are not statistically significant, indicating no causal impact of ESG metrics on firms' ESG performance.

Table IA.4 shows that this conclusion remains invariant when considering the combined LSEG ESG rating of a company: in this case as well, the specifications with firm fixed effects indicate that a firm's ESG performance deteriorates following the introduction of ESG metrics, while the rest of the estimates show no significant effects of ESG metrics on ESG performance.

Overall, our findings suggest that ESG metrics do not improve firms' overall ESG profile but may divert attention to easier-to-achieve and better-performing objectives when boards anticipate poor ESG performance.

5.3 Say-on-Pay and Shareholder Dissent

Evidence that ownership structure and uncertainty over the firm's strategy affect metric usage suggests that firms choose to disclose compensation metrics to appease shareholders. To evaluate whether this is the case, we examine shareholder opposition to say-on-pay proposals, which are viewed not only as votes on executive compensation and its link to a company's performance but also as a measure of shareholders' support for a company's overall strategy (Cuñat, Giné, and Guadalupe, 2016). We conjecture that compensation metrics may help clarify to outside shareholders the performance targets on which executives are rewarded, thereby building consensus around the compensation contract and limiting outside interference with corporate strategy, without meaningfully changing it.

To evaluate this conjecture, Panel A of Table 9 shows that compensation metrics of any type appear to have a similar positive effect in appeasing shareholders. The dependent variable is the average support for management-sponsored say-on-pay proposals voted on at a company's annual meeting.[11] Our variable of interest is the number of individual metrics across metric types. Following prior literature, we include controls for the level of total compensation and the company's prior returns, as shareholders are known to oppose particularly generous compensation packages and vote against management when firms perform poorly (Ertimur, Ferri, and Muslu,

[11] In our sample, 83.2% of firms hold an annual say-on-pay vote, 16% hold it every three years, and 1% hold it every two years. The results we present hereafter are quantitatively and qualitatively similar, irrespective of the frequency of the say-on-pay vote.

2011; Ertimur, Ferri, and Oesch, 2013). We also control for the firm's market capitalization, as compensation is expected to be higher in larger companies (e.g., Edmans, Gabaix, and Jenter, 2017).

The number of individual metrics included in the contract increases shareholder support for management-sponsored say-on-pay proposals. As shown in column 1 of Panel A, each additional individual metric is associated with a 0.2 percentage point increase in the mean say-on-pay approval rate.

A correlation between ESG metrics usage and say-on-pay votes could reflect shareholder support for firms with explicit sustainability policies (see e.g., Cohen et al., 2023). It is thus important to assess the impact of different types of metrics on the say-on-pay vote. If ESG metrics, like all other metrics, play a role in increasing shareholder support, we would not expect ESG, operating, earnings, and market metrics to have significantly different effects. To test this, we include each metric type separately in columns 2-5 of Panel A to assess its incremental effect beyond the total number of metrics. Consistent with our hypothesis, we find that individual metric categories exhibit statistically insignificant effects; importantly, the number of individual metrics continues to increase shareholder support in say-on-pay votes. This finding confirms that different types of metrics perform a similar function and highlights the importance of considering all metrics jointly.

A concern with the causal interpretation of the impact of metric usage on shareholder support is that firm-level omitted factors driving shareholders' consensus could also lead to a higher propensity to use compensation metrics. For instance, better-governed firms or firms with stronger shareholder alignment may both enjoy higher say-on-pay support and choose to provide more detailed compensation disclosures.

To address these endogeneity concerns about metric selection, in Panel B of Table 9, we adapt our instrumental variable approach, exploiting variation in metric usage by a firm's marginal ISS peers. Specifically, we instrument a firm's number of individual metrics using the corresponding metrics of its marginal ISS peers, while controlling for the number of metrics used by marginal non-peers. We also control for the absolute sales distance between marginal peers and non-peers, as well as the interaction of the sales distance with our instrument.

The first-stage results in columns 2 and 5 indicate that the use of compensation metrics by both ISS marginal peers and non-peers helps explain the extent to which a firm employs these metrics, although the effect of marginal peers is consistently larger. In column 3, we use ISS peers' metric usage as an instrument for the focal firm's metric usage, while controlling for marginal non-peers' usage.[12] Interestingly, the latter does not appear to have an effect on shareholder support for the compensation package. In contrast, the coefficients on the instrumented individual metrics are positive and statistically significant. The IV estimates suggest that an additional individual metric increases say-on-pay approval by 1.83 (3.50) percentage points in column 3 (6).

The ISS-driven metric effects are economically larger than those from the OLS regressions, suggesting that metrics adopted due to ISS peer influence (captured by the IV approach) have a stronger effect on say-on-pay approval than the average effect of the individual metrics (captured by the OLS regressions).

Overall, the findings in Table 9 support the hypothesis that compensation metrics appease shareholders and build consensus.

In Table 10, we further address the concern that better-run firms with more shareholder consensus use more compensation metrics. If this were the case, we would not expect to observe

[12] The first-stage F-statistics of 81.52 and 37.65 indicate that our instrument is not weak.

that firms increase the number of metrics reported after experiencing dissent on say-on-pay votes. We find that firms tend to increase the number of broad metric categories and the number of specific metrics included in the CEO's contract following shareholder dissent on say-on-pay proposals. Specifically, a one-percentage-point increase in the mean say-on-pay dissent rate leads to approximately 0.14 additional metric types and 0.25 additional individual metrics. The effect appears to be larger in magnitude when companies experience higher dissent rates over a longer period – three years in even-numbered columns versus one year in odd-numbered columns. This result confirms that firms tend to adopt more compensation metrics after experiencing shareholder dissent – that is, in circumstances when they face greater pressure to appease shareholders – and further mitigates concerns that better-run firms with more shareholder consensus have more detailed compensation disclosures.

5.4 ESG and Other Shareholder Proposals

We examine whether compensation metrics foster consensus beyond say-on-pay votes by assessing the likelihood that firms receive shareholder proposals. Shareholder proposals are a form of low-cost shareholder activism that addresses various corporate issues, including governance (e.g., executive pay, takeover defenses, board independence), stakeholder matters (e.g., labor unions, supply chains), and other ESG concerns. Because most companies do not receive any proposals in a given year, the receipt of shareholder proposals is often viewed as a measure of shareholder dissent (Aggarwal et al., 2025). Management is often reluctant to welcome proposals, citing inconsistent quality, limited understanding of corporate strategy among individual shareholders, and the costs in terms of managerial time (Denes, Karpoff, and McWilliams, 2017;

Gantchev and Giannetti, 2021). Compensation metrics may reduce the number of unwanted shareholder proposals, and ESG metrics in particular may help weed out ESG proposals.

We first examine ESG proposals, which rarely pass and can therefore be considered a nuisance by firm management, which must address these proposals at shareholder meetings (He, Kahraman, and Lowry, 2023; Michaely, Ordonez-Calafi, and Rubio, 2024). Shareholders may submit ESG proposals to draw attention to firms' ESG policies, but may deem this unnecessary when ESG metrics are already in place. Table 11 shows that not only ESG metrics but all types of metrics are negatively associated with the probability that a company receives a shareholder-sponsored ESG proposal. In Panel A, disclosing an ESG metric in the CEO's compensation contract reduces the likelihood of receiving such proposals by approximately 2.27 percentage points (column 1), equivalent to a 17.73% reduction based on the unconditional probability of 12.8% in the sample. When we consider material ESG metrics (columns 3 and 4), the effect becomes even stronger, with material ESG metrics reducing the probability by 2.58 percentage points.

Notably, the disclosure of operating and earnings metrics also reduces the likelihood of ESG proposals by around 1.8-2.0 percentage points, as shown in columns 2 and 4. The similar effect across metrics suggests that pay metrics reduce shareholder interference by enhancing shareholders' understanding of corporate strategy. Interestingly, while the disclosure of market metrics in compensation contracts also decreases the likelihood of receiving a shareholder-sponsored ESG proposal, the effect is smaller than that for other metrics (approximately 1 percentage point). Additionally, positive news related to the firm's ESG performance decreases the probability of an ESG proposal, and the effect is substantial in terms of economic magnitude. A one-standard-deviation improvement in ESG performance is associated with a 1.12% decrease

in the probability of receiving an ESG proposal (column 2), corresponding to 8.78% of the unconditional probability in the sample.

Panel B of Table 11 uses instrumental variables to evaluate the causal effect of ESG metrics adoption. As before, we instrument a firm's use of ESG metrics with the number of individual metrics used by marginal ISS peers, controlling for the usage of metrics by marginal non-peers, the distance in sales between marginal peers and non-peers, and the interaction between the latter and our instrument. The F-statistics of the excluded instruments in the first stage are well above the conventional thresholds for weak instruments. The IV estimates reveal larger effects than those from OLS, with ESG metrics reducing the probability of ESG proposals by 23.4 percentage points (column 3) in the sample of firms with at least 14 peers; however, the effect is not statistically significant in the 24-peer subsample, presumably because of a lack of statistical power.

Panel C considers all shareholder-sponsored proposals. We find that each additional individual metric is negatively associated with shareholders' propensity to submit proposals, reducing the probability by 0.46 percentage points (column 1). The IV estimates (columns 3 and 6) show larger effects of 5.94 and 4.22 percentage points, respectively, though only the first coefficient is statistically significant.

5.5 Opposition to Management Proposals

To further test our hypothesis that compensation metrics build shareholder consensus, we examine a direct measure of shareholder dissent against management's strategic decisions. In Table 12, we consider the average percentage of votes cast against management proposals at a firm's annual meeting. Consistent with our earlier results, we find that a higher number of metrics in the executive contract is associated with less dissent. The effect is not only statistically

significant but also economically meaningful. The OLS results in columns 1 and 4 show that each additional individual metric type is associated with a 0.12 percentage point reduction in average opposition. Given the mean opposition rate of 5.7% in our sample, these results represent economically meaningful reductions of 2.1%.

To address potential endogeneity in metric selection, the remaining columns present instrumental variable estimates using ISS peer metric usage as an instrument, following our earlier approach. The first-stage results demonstrate strong instruments with F-statistics of 81.52 and 37.65. As shown in columns 3 and 6, the IV estimates reveal larger economic effects – each additional individual metric reduces the average vote against management by 1.07 and 1.31 percentage points, respectively, equivalent to 18.8% and 23.0% lower shareholder dissent relative to the mean dissent of 5.7%.

Overall, the evidence supports our conjecture that metrics are used to appease shareholders. The fact that compensation metrics reduce opposition to all types of management proposals, not just those related to compensation, suggests that the consensus-building effect extends well beyond executive compensation to encompass broader corporate governance and strategic decisions.

5.6 Information Environment

Compensation metrics could increase shareholder support by communicating a firm's strategy or simply appease shareholders, without increasing the transparency of the corporate strategy. To provide evidence on whether information asymmetry is lower in firms that disclose more compensation metrics, we consider how metrics affect a firm's stock liquidity. We also capture changes in a firm's information environment using analysts' forecast dispersion, the error in the mean forecasts, and the absolute standardized unexpected earnings in year t+1, calculated

as the absolute value of the difference between actual reported earnings and the median consensus forecast, scaled by the standard deviation of analyst forecasts (Barron et al., 1998). We would expect the bid-ask spread, the analysts' forecast dispersion, the error in the mean forecasts, and the unexpected earnings to be lower for firms that disclose more metrics if their disclosure enhances a firm's information environment and shareholders' understanding of its strategy.

Table 13 examines whether compensation metrics are associated with improved stock liquidity, as measured by the relative bid-ask spread in year t+1. We use our instrumental variable approach, instrumenting a firm's number of individual metrics with the metrics of its marginal ISS peers. Both the OLS and IV estimates show that compensation metrics are not associated with lower bid-ask spreads. In fact, the coefficients are statistically insignificant across all specifications. Table 14 provides analogous evidence for the analysts' forecast dispersion, the error in the mean forecasts, and the absolute standardized unexpected earnings. These results suggest that the disclosure of compensation metrics does not reduce information asymmetry and are consistent with the interpretation that compensation metrics primarily serve to appease shareholders rather than to communicate meaningful strategic information about the firm.

6. Conclusions

Social and environmental goals are increasingly important for corporations and often require commitments that typically stretch well beyond the tenure of any individual CEO. For this reason, activist investors worry that companies make bold, long-term promises without taking the short-term actions needed to deliver on them. Relating compensation to ESG targets is often indicated as a solution.

We show that ESG metrics cannot be considered a panacea. Not only do boards select ESG metrics in areas where the firm is already performing relatively well, but ESG metrics do not appear to affect a firm's subsequent overall ESG performance. ESG metrics, like all other metrics, appear to be used to limit shareholder interference with corporate strategy.

Our findings invite reflection among institutional investors who advocate for integrating ESG criteria into executive compensation. While such initiatives are often motivated by the desire to align managerial incentives with broader societal objectives, they may in practice serve as a symbolic mechanism rather than a substantive response to sustainability concerns. Achieving meaningful progress requires investors to engage more deeply with how firms define strategic priorities and allocate capital.

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Appendix A. Variable Definition

Variable	Definition	Source
Compensation Variables		
ESG Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes at least one ESG metric in a given year, and zero otherwise.	ISS Executive Compensation Analytics (ECA)
Material ESG Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes at least one ESG metric in a given year that is material for the firm, and zero otherwise. Materiality is determined by SASB.	ISS ECA
First ESG Metric (*firm-year-metric-level*)	Indicator variable equal to one if the compensation contract of a firm's CEO includes a specific ESG metric for the first time, and zero otherwise.	ISS ECA
First Material ESG Metric (*firm-year-metric-level*)	Indicator variable equal to one if the compensation contract of a firm's CEO includes a material ESG metric for the first time, and zero otherwise. Materiality is determined by SASB.	ISS ECA
Operating Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes at least one operating metric in a given year, and zero otherwise. Operating metrics include metrics related to sales, investment, efficiency, and capital structure.	ISS ECA
Earnings Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes at least one earnings metric in a given year, and zero otherwise. Earnings metrics include metrics related to profitability and cashflow.	ISS ECA
Market Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes at least one market-related metric in a given year, and zero otherwise.	ISS ECA
Marg. Peers' Num Metrics	Average number of individual compensation metrics used by a firm's ISS-designated marginal peers in a given year.	ISS ECA
Marg. Non-peers' Num Metrics	Average number of individual compensation metrics used by a firm's ISS marginal non-peers in a given year.	ISS ECA
Marg. Peers' ESG Metrics	Average number of ESG metric types used by a firm's ISS-designated marginal peers in a given year.	ISS ECA
Marg. Non-peers' ESG Metrics	Average number of ESG metric types used by a firm's ISS marginal non-peers in a given year.	ISS ECA
Fraction Marg. Peers - Same Metric	Fraction of a firm's ISS-designated marginal peers that use the same specific compensation metric in a given year.	ISS ECA
Fraction Marg. Non-peers - Same Metric	Fraction of ISS marginal non-peers that use the same specific compensation metric in a given year.	ISS ECA
Num Metric Types	Sum of different types of compensation metrics included in a CEO's contract in a given year. There are 4 types of metrics – ESG, operating, earnings, and market.	ISS ECA
Num Metric Types Excl. Mkt	Sum of different types of compensation metrics included in a CEO's contract in a given year, excluding the market metric.	ISS ECA
Num Indiv. Metrics	Sum of individual compensation metrics included in a CEO's contract in a given year. These include 24 SASB categories of ESG metrics, 5 categories of operating metrics, 2 categories of earnings metrics, and a market metric.	ISS ECA

Num ESG Metrics	Sum of up to 24 SASB categories of ESG metrics included in the compensation contract of a firm's CEO in a given year.	ISS ECA
Num Operating Metrics	Sum of up to 5 operating metrics included in the compensation contract of a firm's CEO in a given year.	ISS ECA
Num Earnings Metrics	Sum of up to 2 earnings metrics included in the compensation contract of a firm's CEO in a given year.	ISS ECA
Share of Equity Comp	Ratio of stock options and restricted stock grants to CEO's total compensation in a given year.	ISS ECA
Cashflow Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes a cashflow metric in a given year, and zero otherwise.	ISS ECA
Profitability Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes a profitability metric in a given year, and zero otherwise.	ISS ECA
Sales Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes a sales metric in a given year, and zero otherwise.	ISS ECA
Efficiency Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes an efficiency metric in a given year, and zero otherwise.	ISS ECA
Investment Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes an investment metric in a given year, and zero otherwise.	ISS ECA
Capital Structure Metric	Indicator variable equal to one if the compensation contract of a firm's CEO includes a capital structure metric in a given year, and zero otherwise.	ISS ECA
Total Comp	Log of a CEO's total compensation in a given year.	ISS ECA
Stock + Options + Bonus	Log of a CEO's option awards, restricted stock grants, and bonus in a given year.	ISS ECA
Stock + Options	Log of a CEO's option awards and restricted stock grants in a given year.	ISS ECA
ESG News Variables		
St. Dev. All Pulse News	Standard deviation over a firm's fiscal year of daily TruValue Pulse Score that aggregates ESG related news in all SASB categories.	FactSet TruValue
Metric-specific Pulse News (*firm-year-metric-level*)	Maximum over a firm's fiscal year of daily TruValue Pulse Score in a specific SASB category of ESG news.	FactSet TruValue
All Categories Pulse News	Maximum over a firm's fiscal year of daily TruValue Pulse Score across all SASB categories of ESG news.	FactSet TruValue
Bad All Categories Pulse News	Minimum over a firm's fiscal year of daily TruValue Pulse Score across all SASB categories of ESG news.	FactSet TruValue
Material Pulse News	Maximum over a firm's fiscal year of daily TruValue Pulse Score across SASB categories of ESG news that are material for a firm.	FactSet TruValue
Metric News	Sum of the maximum over a firm's fiscal year of the news associated with the specific metrics incorporated in the CEO compensation contract.	FactSet TruValue
Below Avg ESG Rank	Indicator variable equal to one if a company is "Below Average" or "Laggard" based on industry percentiles across all SASB categories of ESG news.	FactSet TruValue
Other Variables		
3-yr return	Firm's return, including dividends, over the past three years.	Worldscope

Log(Var Daily Returns)	Log of the variance of daily stock returns.	Datastream
St. Dev. Ind-adj. ROE	Rolling five-year standard deviation of country-industry-year-adjusted return on equity.	Worldscope
Log Mkt Cap	Log of the firm's market capitalization.	Worldscope
Inst Block Own	Combined ownership of a firm's equity by institutional owners with at least 5% ownership stakes.	FactSet Ownership
Large Non-Inst Block	Indicator variable equal to one if at least one non-institutional owner of a firm's equity exceeds 10% ownership.	FactSet Ownership
CEO Tenure	The difference in years between the year in which an executive assumes the CEO role and the current fiscal year.	ISS ECA
Mean Say-on-Pay Approval	Average pass rate of say-on-pay management proposals in a given year.	ISS Voting Analytics
Avg. Vote Against Mgmt	Average rate of "against" vote on all management proposals in a given year.	ISS Voting Analytics
ESG Proposal	Indicator equal to one if a firm receives at least one shareholder-sponsored ESG proposal in a given year.	ISS Voting Analytics
Num Shr. Prop	Number of all shareholder-sponsored proposals (excluding proxy contests) submitted to a firm in a given year.	ISS Voting Analytics
Ind-adj. CF/Assets	Ratio of a firm's cashflow to total assets, adjusted by subtracting the country-industry-year mean.	Worldscope
St. Dev. Ind-adj. CF/Assets	Rolling five-year standard deviation of country-industry-year-adjusted ratio of a firm's cashflow to total assets.	Worldscope
Ind-adj Profitability	Ratio of a firm's operating income before depreciation to total assets, adjusted by subtracting the country-industry-year mean.	Worldscope
St. Dev. Ind-adj Profitability	Rolling five-year standard deviation of country-industry-year-adjusted ratio of a firm's operating income before depreciation to total assets.	Worldscope
Ind-adj Sales/Assets	Ratio of a firm's sales to total assets, adjusted by subtracting the country-industry-year mean.	Worldscope
St. Dev. Ind-adj Sales/Assets	Rolling five-year standard deviation of country-industry-year-adjusted ratio of a firm's sales to total assets.	Worldscope
Ind-adj. COGS/Sales	Ratio of a firm's cost of goods sold to total assets, adjusted by subtracting the country-industry-year mean.	Worldscope
St. Dev. Ind-adj. COGS/Sales	Rolling five-year standard deviation of country-industry-year-adjusted ratio of a firm's cost of goods sold to total assets.	Worldscope
Ind-adj. PPE/Assets	Ratio of a firm's property, plant and equipment to total assets, adjusted by subtracting the country-industry-year mean.	Worldscope
St. Dev. Ind-adj. PPE/Assets	Rolling five-year standard deviation of country-industry-year-adjusted ratio of a firm's property, plant and equipment to total assets.	Worldscope
Ind-adj. Book Leverage	Ratio of a firm's total debt to total assets, adjusted by subtracting the country-industry-year mean.	Worldscope
St. Dev. Ind-adj. Book Leverage	Rolling five-year standard deviation of country-industry-year-adjusted ratio of a firm's total debt to total assets.	Worldscope
Relative Bid-Ask Spread	(Ask–Bid)/((Ask+Bid)/2) using daily bid and ask prices and averaging over the year	Datastream
Analyst Consensus Dispersion	Standard deviation of individual analyst forecasts divided by the absolute value of the median consensus forecast.	IBES

Absolute Forecast Error	Absolute value of the difference between actual reported earnings and the median consensus forecast, scaled by the absolute value of the median consensus forecast.	IBES
Standardized Unexpected Earnings (SUE)	Absolute value of the difference between actual reported earnings and the median consensus forecast, scaled by the standard deviation of analyst forecasts.	IBES

Appendix B. Examples of metric descriptions

This appendix presents examples of disclosed metrics from executive compensation contracts and illustrates how we use the dictionary in Table IA.D to classify these metrics into various types – ESG, earnings, operating, and market metrics, which include our 31 specific metric categories. Compensation data are obtained from Executive Compensation Analytics (ECA) provided by Institutional Shareholder Services (ISS). The international sample includes firms from 34 countries from 2011 to 2021.

Company	**Year**	**Metric Description**	**Specific Metric Type**	**Broad Metric Type**
EMCOR Group, Inc.	2021	Continue to emphasize long-term goal of a 20 percent per capita **reduction** in **GHG** by 2035	GHG Emissions	ESG
Liontrust Asset Management Plc	2020	Improve **gender diversity** at senior levels and introduction of measures to increase **gender diversity** in the recruitment process	Employee Engagement, Diversity & Inclusion	ESG
Barloworld Ltd.	2021	**Safety** through targets that included zero **fatalities** and achievement of **LTIFR** targets	Employee Health & Safety	ESG
Endo International Plc	2020	Deliver on year-end 2020 net **debt leverage** ratio objectives	Capital Structure	Operating
Laredo Petroleum, Inc.	2016	**General and administrative expense** ($/BOE)	Efficiency	Operating
Kosmos Energy Ltd.	2019	Project **Capital Expenditure** (**CapEx**) of less than $500 million	Investment	Operating
The Descartes Systems Group Inc.	2014	**Cash** generated from operations	Cashflow	Earnings
Aimia Inc.	2019	**TSR** relative to the companies in the TSX Small Cap Index	Market	Market

Figure 1. Pay metrics and other metric types

This figure plots the proportion of firms that report different types of compensation metrics, both globally and across regions. Compensation data are obtained from Executive Compensation Analytics (ECA) provided by Institutional Shareholder Services (ISS). The international sample includes firms from 34 countries from 2011 to 2021.

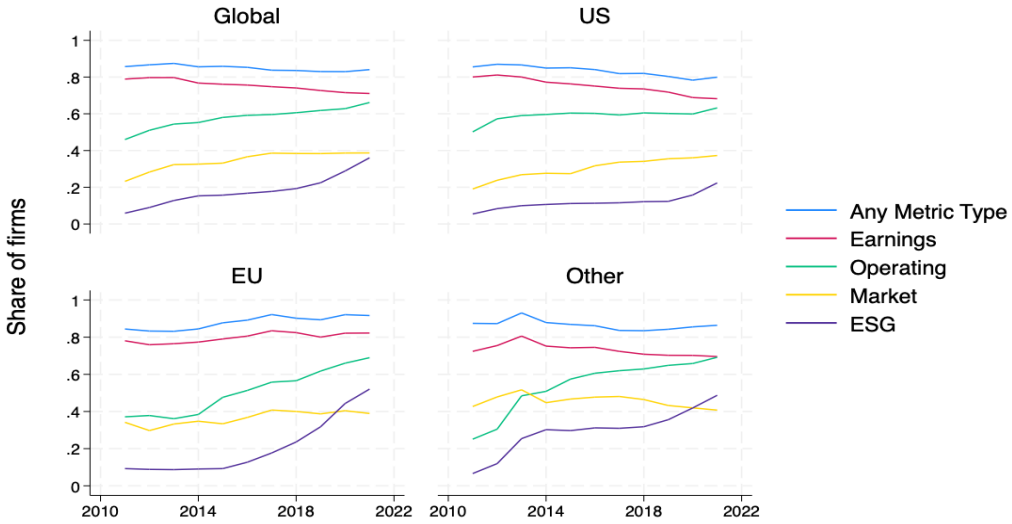


Figure 2. ESG metrics materiality

This figure plots the share of firms with ESG metrics over time, distinguishing between firms with material, non-material, and unclassified metrics (i.e., metrics that cannot be assigned to a specific SASB category). Compensation data are obtained from Executive Compensation Analytics (ECA) provided by Institutional Shareholder Services (ISS). The international sample includes firms from 34 countries from 2011 to 2021.

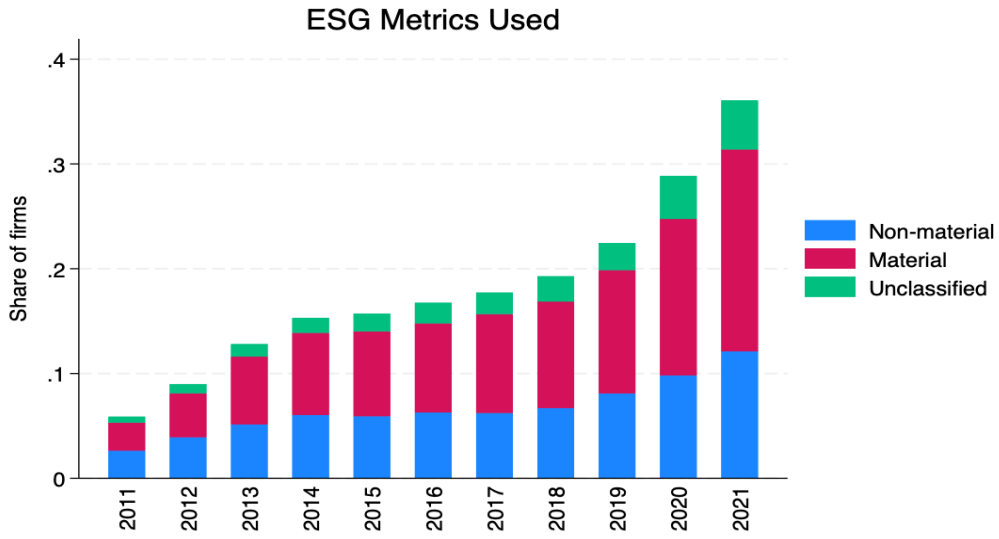
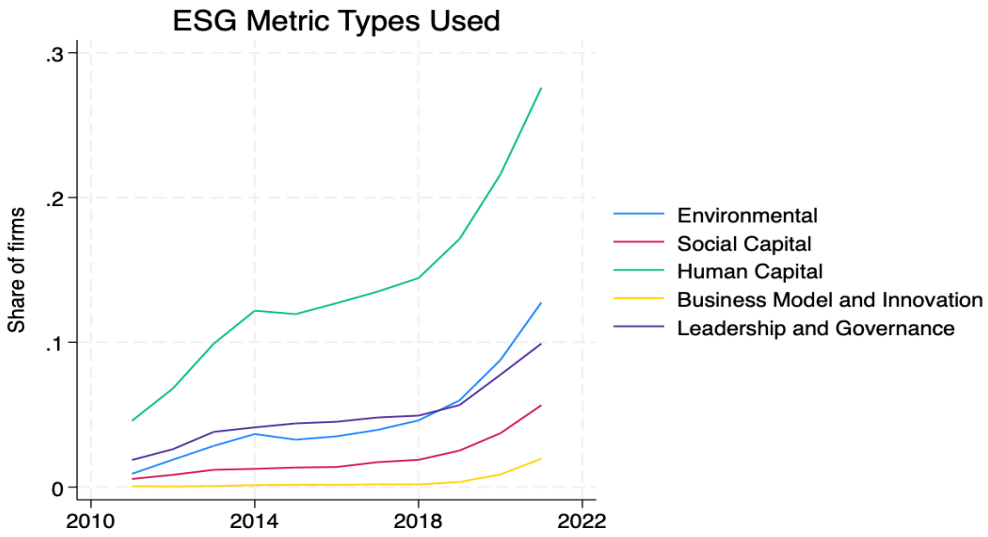


Figure 3. Types of ESG metrics

This figure plots the share of sample firms using different types of ESG metrics. Panel A considers the broad SASB categories, while Panel B focuses on the specific categories. Compensation data are obtained from Executive Compensation Analytics (ECA) provided by Institutional Shareholder Services (ISS). The international sample includes firms from 34 countries from 2011 to 2021.

Panel A. Broad categories



Panel B. Specific metrics

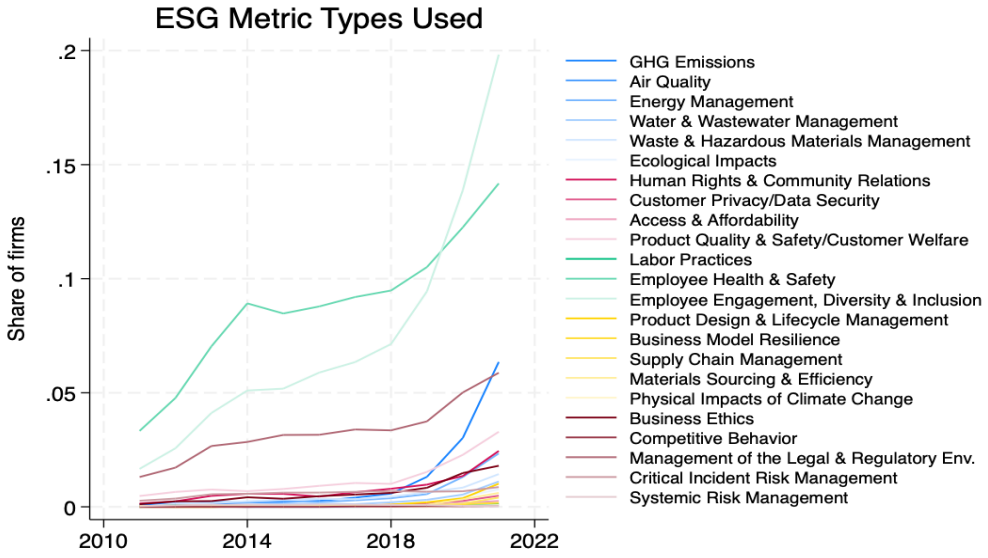


Figure 4. Operating metrics

This figure plots the share of sample firms using different types of operating metrics. Compensation data are obtained from Executive Compensation Analytics (ECA) provided by Institutional Shareholder Services (ISS). The international sample includes firms from 34 countries from 2011 to 2021.

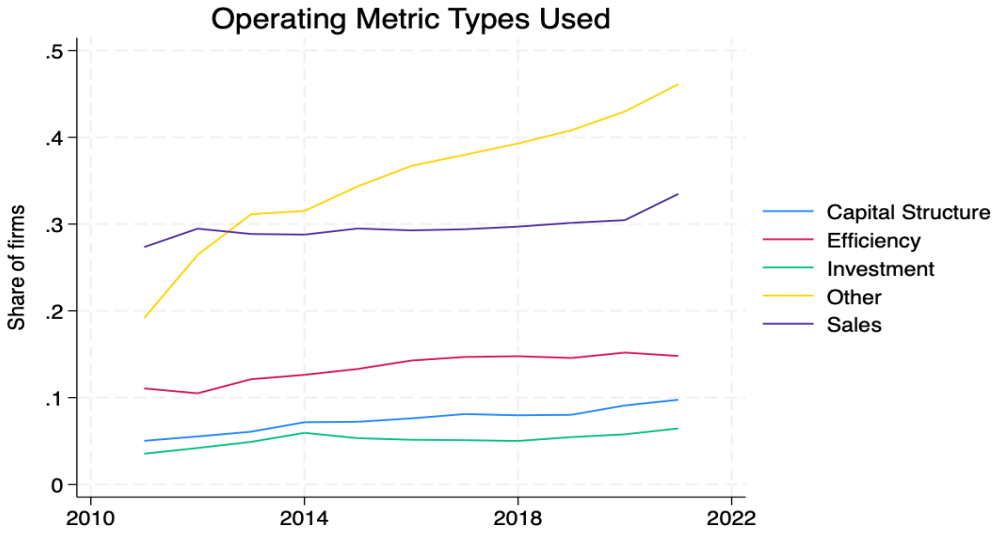
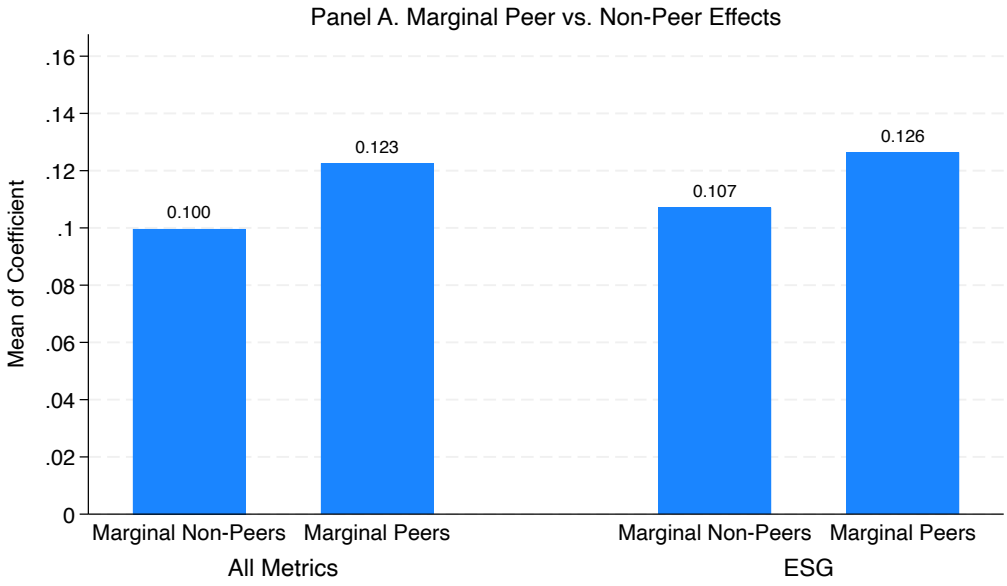


Figure 5. Marginal peer effects on compensation metric adoption

This figure examines the influence of marginal peers (firms just above the ISS peer selection threshold) versus marginal non-peers (firms just below the threshold) on compensation metric adoption decisions. The sample includes all firm-year-metric observations with at least 14 total peers, consistent with ISS minimum requirements. Panel A shows the regression coefficients of marginal peers and marginal non-peers on the probability of first-time adoption of ESG metrics and all metrics (ESG, operating, earnings, and market metrics). Panel B displays the difference between these coefficients (marginal peers minus marginal non-peers) with 95% confidence intervals. A positive difference indicates that marginal peers have stronger influence on metric adoption than marginal non-peers. All regressions include firm and year fixed effects with standard errors clustered by firm.



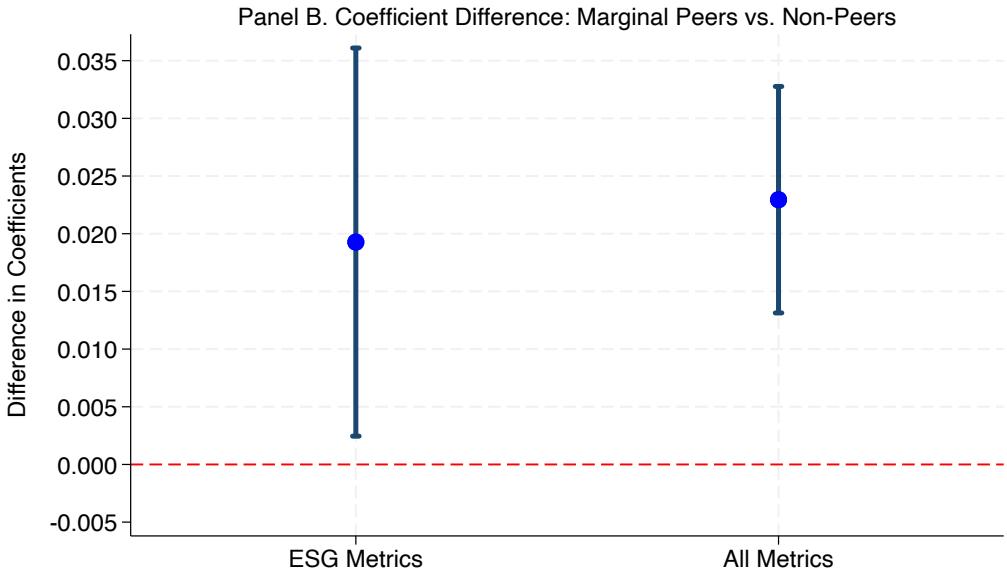


Table 1. Summary statistics

The table presents summary statistics across three groups of variables, with compensation variables in Panel A, ESG news in Panel B, and other variables in Panel C. The sample covers the period from 2011 to 2021. All variables are defined in Appendix A.

	N	Mean	St. Dev.	10%	Median	90%
Panel A. Compensation Variables						
ESG Metric	44,348	0.22	0.414	0	0	1
Material ESG Metric	43,766	0.122	0.328	0	0	1
First ESG Metric (firm-year-metric level)	1,099,677	0.006	0.079	0	0	0
Operating Metric	44,348	0.627	0.484	0	1	1
Earnings Metric	44,348	0.804	0.397	0	1	1
Market Metric	44,348	0.392	0.488	0	0	1
Num Metric Types	44,348	2.043	1.143	0	2	4
Num Metric Types Excl. Mkt	44,348	1.651	0.899	0	2	3
Num Indiv. Metrics	44,348	2.739	1.937	0	3	5
Num ESG Metrics	44,348	0.332	0.85	0	0	1
Num Operating Metrics	44,348	1.004	0.995	0	1	2
Num Earnings Metrics	44,348	1.012	0.635	0	1	2
Share of Equity Comp	42,488	0.375	0.292	0	0.394	0.751
Cashflow Metric	44,348	0.246	0.431	0	0	1
Profitability Metric	44,348	0.766	0.424	0	1	1
Sales Metric	44,348	0.329	0.47	0	0	1
Efficiency Metric	44,348	0.152	0.359	0	0	1
Investment Metric	44,348	0.054	0.226	0	0	0
Capital Structure Metric	44,348	0.081	0.273	0	0	0
Total Comp	42,351	14.92	1.232	13.48	14.97	16.36
Stock + Options + Bonus	38,238	14.26	1.464	12.37	14.43	15.96
Stock + Options	32,442	14.29	1.475	12.31	14.48	15.98
Panel B. ESG News Variables						
St. Dev. All Pulse News	44,343	10.02	7.782	0	9.612	20.37
Metric-specific Pulse News (firm-year-metric level)	447,452	60.48	21.34	32.77	59.1	90.36
All Categories Pulse News	44,348	71.20	18.74	47.83	74.36	92.93
Material Pulse News	40,896	69.67	20.32	43.77	73.21	93.43
Metric News	44,348	17.23	53.27	0	0	72.42
Below Avg ESG Rank	44,348	0.205	0.404	0	0	1
Panel C. Other Variables						
3-yr return	40,779	9.984	34.85	-20.22	9.56	36.98
Log(Var Daily Returns)	40,986	-7.529	1.158	-8.788	-7.656	-6.188
St. Dev. Ind-adj. ROE	43,918	0.299	0.575	0.029	0.092	0.739
Log Mkt Cap	44,034	21.25	1.901	18.83	21.26	23.72
Inst Block Own	41,518	0.174	0.171	0	0.133	0.418
Large Non-Inst Block	43,065	0.345	0.475	0	0	1
CEO Tenure	35,910	8.242	7.411	1	6	18
Mean Say-on-Pay Approval	32,140	0.909	0.123	0.758	0.955	0.991
Avg. Vote Against Mgmt	40,167	0.057	0.067	0.011	0.036	0.124
ESG Proposal	44,348	0.128	0.335	0	0	1

Num Shareholder Prop	40,170	0.175	0.769	0	0	0
Ind-adj. CF/Assets	43,977	0.312	0.299	-0.004	0.315	0.651
St. Dev. Ind-adj. CF/Assets	43,906	0.076	0.160	0.011	0.041	0.132
Ind-adj Profitability	43,480	0.260	0.291	-0.004	0.270	0.595
St. Dev. Ind-adj Profitability	43,326	0.076	0.160	0.010	0.042	0.130
Ind-adj Sales/Assets	43,984	0.104	0.623	-0.503	-0.016	0.873
St. Dev. Ind-adj Sales/Assets	43,920	0.122	0.147	0.014	0.080	0.269
Ind-adj. COGS/Sales	37,677	-11.610	53.110	-54.970	-4.967	24.340
St. Dev. Ind-adj. COGS/Sales	37,328	8.349	24.350	1.350	3.554	15.140
Ind-adj. PPE/Assets	43,394	0.012	0.237	-0.215	-0.018	0.376
St. Dev. Ind-adj. PPE/Assets	43,213	0.036	0.044	0.004	0.022	0.079
Ind-adj. Book Leverage	41,576	-5.936	22.040	-33.980	-6.287	18.620
St. Dev. Ind-adj. Book Leverage	39,210	3.996	6.262	0.788	2.519	7.839

Table 2. ESG and other compensation metrics

This table presents firm-year-level regressions of ESG metrics on other compensation metrics. Panel A reports regressions of an indicator for the presence of an *ESG Metric* (*Material ESG Metric*) on contemporaneous indicators for operating, earnings, and market metrics. Panel B presents regressions of the number of broad metric types (ESG, operating, earnings, and market), including and excluding market metrics, on the ratio of equity-linked compensation to total executive pay. Odd-numbered columns include year, industry, and country fixed effects, while even-numbered columns include firm and year fixed effects. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

Panel A. ESG and material ESG metrics

	(1)	(2)	(3)	(4)
	ESG Metric		Material ESG Metric	
Operational Metric	0.1507***	0.1172***	0.0810***	0.0716***
	(22.22)	(15.72)	(14.88)	(12.21)
Earnings Metric	0.0534***	0.0901***	0.0364***	0.0563***
	(6.68)	(9.02)	(5.49)	(6.49)
Market Metric	0.0742***	0.0287***	0.0452***	0.0263***
	(10.35)	(3.83)	(7.83)	(4.47)
Observations	41,516	43,385	40,982	42,823
Year FE	YES	YES	YES	YES
Industry FE	YES	NO	YES	NO
Country FE	YES	NO	YES	NO
Firm FE	NO	YES	NO	YES
Adjusted R2	0.283	0.578	0.266	0.594

Panel B. Metrics and equity compensation

	(1)	(2)	(3)	(4)
	Num Metric Types		Num Metric Types Excl. Mkt	
Share of Equity Comp	0.8722***	0.1620***	0.5093***	0.0450**
	(22.63)	(6.85)	(16.53)	(2.29)
Observations	39,982	41,587	39,982	41,587
Year FE	YES	YES	YES	YES
Industry FE	YES	NO	YES	NO
Country FE	YES	NO	YES	NO
Firm FE	NO	YES	NO	YES
Adjusted R2	0.186	0.681	0.127	0.628

Table 3. Determinants of ESG metric usage

This table presents firm-year-level regressions of (material) ESG compensation metrics in Panel A and environmental, social, and governance metrics in Panel B. Odd-numbered columns include year, industry, and country fixed effects, while even-numbered columns include firm and year fixed effects. All firm-level variables (except *CEO Tenure*) are lagged and described in Appendix A. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

Panel A. ESG and material ESG metrics

	(1)	(2)	(3)	(4)
	ESG Metric		Material ESG Metric	
CEO Tenure	-0.0016***	-0.0004	-0.0011***	-0.0008*
	(-3.45)	(-0.66)	(-2.95)	(-1.76)
Log(Var Daily Returns)	0.0168***	-0.0059*	0.0161***	-0.0075***
	(4.22)	(-1.82)	(5.11)	(-3.00)
St. Dev. All Pulse News	0.0008**	0.0000	0.0005*	-0.0000
	(2.26)	(0.01)	(1.92)	(-0.25)
St. Dev. Ind-adj. ROE	0.0057	0.0017	-0.0079*	-0.0024
	(0.79)	(0.21)	(-1.68)	(-0.38)
Below Avg ESG Rank	-0.0081	-0.0015	-0.0053	0.0006
	(-1.09)	(-0.26)	(-0.89)	(0.12)
Log Mkt Cap	0.0277***	0.0032	0.0147***	-0.0043
	(10.72)	(0.60)	(7.11)	(-1.01)
Inst Block Own	0.0069	-0.0028	-0.0001	-0.0158
	(0.29)	(-0.13)	(-0.00)	(-0.98)
Large Non-Inst Block	-0.0468***	-0.0175	-0.0382***	-0.0214**
	(-5.20)	(-1.54)	(-5.14)	(-2.46)
Observations	26,731	26,298	26,493	26,071
Year FE	YES	YES	YES	YES
Industry FE	YES	NO	YES	NO
Country FE	YES	NO	YES	NO
Firm FE	NO	YES	NO	YES
Adjusted R2	0.274	0.621	0.291	0.667

Panel B. Environmental, social and governance metrics

	(1)	(2)	(3)	(4)	(5)	(6)
	Env Metric		Social Metric		Gov Metric	
CEO Tenure	-0.0003	0.0004	-0.0019***	-0.0010**	-0.0003	-0.0001
	(-1.17)	(1.17)	(-4.56)	(-2.02)	(-1.19)	(-0.33)
Log(Var Daily Returns)	0.0051***	-0.0051***	0.0134***	-0.0048*	0.0062**	-0.0025
	(2.60)	(-2.85)	(3.75)	(-1.69)	(2.47)	(-1.04)
St. Dev. All Pulse News	-0.0001	-0.0003**	0.0007**	-0.0001	0.0002	-0.0001
	(-0.54)	(-2.16)	(2.16)	(-0.58)	(0.73)	(-0.41)
St. Dev. Ind-adj. ROE	-0.0025	0.0000	-0.0037	0.0018	0.0014	0.0008
	(-0.82)	(0.01)	(-0.63)	(0.26)	(0.28)	(0.17)
Below Avg ESG Rank	-0.0041	-0.0049	-0.0063	-0.0036	0.0042	0.0045
	(-0.97)	(-1.32)	(-0.94)	(-0.70)	(0.84)	(1.07)
Log Mkt Cap	0.0109***	-0.0093***	0.0244***	-0.0018	0.0073***	0.0048
	(7.77)	(-2.61)	(10.93)	(-0.39)	(4.01)	(1.29)
Inst Block Own	-0.0362***	-0.0111	0.0278	0.0052	-0.0101	-0.0121
	(-3.37)	(-0.98)	(1.36)	(0.29)	(-0.68)	(-0.85)
Large Non-Inst Block	-0.0220***	-0.0020	-0.0439***	-0.0179*	-0.0086	-0.0025
	(-4.21)	(-0.28)	(-5.39)	(-1.79)	(-1.51)	(-0.33)
Observations	26,731	26,298	27,063	26,623	27,063	26,623
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	NO	YES	NO	YES	NO
Country FE	YES	NO	YES	NO	YES	NO
Firm FE	NO	YES	NO	YES	NO	YES
Adjusted R2	0.243	0.560	0.295	0.633	0.0820	0.471

Table 4. ESG compensation metrics – metric-level analysis

This table reports regressions of the first introduction of individual ESG metrics in the CEO's contract. Columns 1-3 investigate the introduction of any ESG metric, column 4 specifically studies the introduction of material ESG metrics, and columns 5-7 consider separately the introduction of new environmental, social or governance metric. ESG news measures are standardized. All regressions include firm and year fixed effects. Standard errors are clustered at the firm level. The t-statistics are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	First ESG Metric			First Material ESG Metric	First Env Metric	First Social Metric	First Gov Metric
Metric-Specific News	0.0039***	0.0038***	0.0043***	0.0024***	0.0040***	0.0083***	0.0009***
	(19.64)	(18.74)	(17.51)	(13.58)	(11.24)	(18.54)	(4.39)
Bad Metric-Specific News			-0.0007***	-0.0010***			
			(-3.08)	(-5.85)			
Below Avg ESG Rank	0.0003	-0.0000	0.0002	0.0003	-0.0002	0.0005	0.0002
	(0.41)	(-0.02)	(0.33)	(0.71)	(-0.20)	(0.43)	(0.38)
Material Metric		0.0031***					
		(6.51)					
Material Metric X Below Avg ESG Rank		0.0009					
		(0.95)					
All Categories Pulse News	-0.0008***	-0.0008***	-0.0008***	-0.0002	-0.0001	-0.0018***	-0.0006**
	(-2.73)	(-2.60)	(-2.67)	(-0.93)	(-0.10)	(-3.47)	(-2.35)
Bad All Categories Pulse News			0.0000	0.0001			
			(0.05)	(0.49)			
Inst Block Own	-0.0012	-0.0012	-0.0012	-0.0012	0.0022	-0.0018	-0.0023
	(-0.55)	(-0.54)	(-0.54)	(-0.89)	(0.57)	(-0.48)	(-1.07)
Large Non-Inst Block	0.0016	0.0016	0.0016	0.0004	0.0016	0.0023	0.0006
	(1.29)	(1.22)	(1.28)	(0.45)	(0.69)	(1.11)	(0.51)
Observations	341,621	339,605	341,621	339,605	83,157	125,939	131,772
Firm FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Adjusted R2	0.0247	0.0250	0.0247	0.0174	0.0489	0.0342	0.0180

Table 5. Total and variable compensation

This table presents a firm-year-level analysis of total and variable CEO compensation as a function of ESG-related (material) news and compensation metric types. *All Categories Pulse News* (*Material Pulse News*) represents the maximum over a firm's fiscal year of the daily TruValue Pulse Score across all (material) SASB categories of ESG news. *Metric News* is the sum of (the maximum over a firm's fiscal year of) the news associated with the specific metrics incorporated in the CEO compensation contract. All other variables are defined in Appendix A. All models include year, industry, and country fixed effects. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Total Comp	Stock+ Options+ Bonus	Stock+ Options	Total Comp	Stock+ Options+ Bonus	Stock+ Options
ESG Metric	0.0432**	0.0436	0.0635**	0.0423**	0.0372	0.0622**
	(2.09)	(1.57)	(2.22)	(2.03)	(1.32)	(2.18)
Operating Metric	0.0811***	0.0911***	0.1333***	0.0835***	0.1032***	0.1344***
	(3.41)	(3.47)	(5.24)	(3.39)	(3.88)	(5.24)
Earnings Metric	0.1444***	-0.0799**	-0.0584	0.1395**	-0.0931**	-0.0633
	(2.79)	(-2.06)	(-1.43)	(2.55)	(-2.36)	(-1.52)
Market Metric	0.2429***	0.3239***	0.3391***	0.2364***	0.3141***	0.3306***
	(11.82)	(15.48)	(15.52)	(11.28)	(15.01)	(14.97)
All Categories Pulse News	0.0029***	0.0038***	0.0044***	0.0017***	0.0026***	0.0030***
	(6.01)	(7.88)	(8.49)	(3.16)	(4.16)	(4.48)
Material Pulse News				0.0016***	0.0018***	0.0020***
				(2.99)	(2.99)	(3.16)
Metric News	0.0003**	-0.0001	-0.0000	0.0002**	-0.0001	-0.0000
	(2.09)	(-0.51)	(-0.22)	(2.04)	(-0.39)	(-0.25)
CEO Tenure	0.0000	-0.0033*	-0.0044**	0.0005	-0.0025	-0.0035*
	(0.03)	(-1.66)	(-2.14)	(0.26)	(-1.25)	(-1.69)
3-yr Return	0.0007***	0.0012***	0.0011***	0.0006***	0.0010***	0.0010***
	(3.22)	(4.39)	(3.87)	(2.78)	(3.80)	(3.43)
Log Mkt Cap	0.3696***	0.4874***	0.4989***	0.3659***	0.4812***	0.4933***
	(29.57)	(65.69)	(66.75)	(27.94)	(64.50)	(65.01)
Observations	27,545	25,544	23,553	26,011	24,192	22,342
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.463	0.537	0.584	0.458	0.536	0.583

Table 6. ISS Peer influence on ESG and non-ESG metric adoption

This table presents estimates of the influence of ISS designated peers on a firm's adoption of compensation metrics. The key independent variables are *Fraction Marg. Peers - Same Metric*, representing the fraction of firms just included in the ISS peer group using the same metric, and *Fraction Marg. Non-peers - Same Metric*, representing the fraction of firms just excluded from the ISS peer group using the same metric. Columns 1-4 examine the full sample of firms with at least 14 peers (ISS minimum requirement), while columns 5-8 focus on the restricted sample of firms with exactly 24 peers (ISS's target peer group size). Columns 3-4 and 7-8 include distance controls for the absolute difference in the average sales of marginal peers and non-peers. All specifications include lagged firm controls and firm and year fixed effects. The p-value of the difference between the coefficients on marginal peers versus marginal non-peers (*Diff p-value*) is reported in the bottom row. Standard errors are clustered at the firm level, with t-statistics reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Num Peers 14-24				*Num Peers = 24*			
	ESG Metrics	All Metrics	ESG Metrics	All Metrics	ESG Metrics	All Metrics	ESG Metrics	All Metrics
Fraction Marg. Peers - Same Metric	0.1365***	0.1229***	0.1365***	0.1244***	0.1437***	0.1184***	0.1543***	0.1219***
	(16.71)	(38.79)	(15.41)	(37.69)	(12.53)	(28.33)	(12.39)	(28.11)
Fraction Marg. Non-peers - Same Metric	0.1103***	0.0995***	0.1103***	0.0995***	0.1084***	0.1063***	0.1084***	0.1064***
	(13.44)	(33.01)	(13.45)	(33.02)	(9.91)	(25.87)	(9.93)	(25.89)
Abs Sales Distance (Peers-Non-peers)			-0.0000	0.0000			0.0000	0.0000*
			(-0.10)	(0.49)			(1.05)	(1.83)
Abs Sales Distance X								
Fraction Marg. Peers - Same Metric			0.0000	-0.0000			-0.0000***	-0.0000***
			(0.01)	(-1.53)			(-3.09)	(-4.01)
Material Metric	0.0023***		0.0023***		0.0020***		0.0020***	
	(5.30)		(5.30)		(3.52)		(3.54)	
Metric-Specific News	0.0001***		0.0001***		0.0001***		0.0001***	
	(11.23)		(11.23)		(9.56)		(9.64)	
All Categories Pulse News	-0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(-1.50)	(0.11)	(-1.50)	(0.10)	(0.33)	(1.17)	(0.30)	(1.15)
Below Avg ESG Rank	0.0005	-0.0001	0.0005	-0.0001	0.0011	-0.0006	0.0011	-0.0006
	(0.67)	(-0.19)	(0.67)	(-0.19)	(1.05)	(-0.74)	(1.04)	(-0.74)
Inst Block Own	-0.0001	0.0013	-0.0001	0.0012	0.0001	0.0019	0.0000	0.0019
	(-0.05)	(0.64)	(-0.05)	(0.64)	(0.03)	(0.67)	(0.01)	(0.67)
Large Non-Inst Block	0.0016	0.0008	0.0016	0.0008	0.0003	-0.0003	0.0004	-0.0003
	(1.10)	(0.85)	(1.10)	(0.85)	(0.16)	(-0.25)	(0.16)	(-0.25)
Observations	283,403	904,051	283,403	904,051	152,785	515,918	152,785	515,918
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Adjusted R2	0.0472	0.0620	0.0472	0.0621	0.0498	0.0650	0.0502	0.0652
Diff p-value	0.0386	5.97E-06	0.0454	1.90E-06	0.0396	0.0833	0.0102	0.0272

Table 7. ESG metric adoption and ESG performance – metric-level analysis

This table presents an analysis of ESG metric usage on ESG performance, measured by metric-specific ESG news in year t+1. The main independent variable is *Specific ESG Metric* equal to one if CEO compensation features a given metric during a year. The instrument is the lagged fraction of marginal ISS peers with the same metric. Columns 1-3 use firms with at least 14 peers (ISS minimum threshold), whereas columns 4-6 use the sample of firms with 24 peers (ISS's target peer group size). All specifications include distance controls that account for the sales similarity between marginal peers and marginal non-peers. First-stage F-statistics are reported in the bottom row. All ESG performance measures are standardized. All regressions include firm and year fixed effects. Standard errors are clustered at the firm level. The t-statistics are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Metric-Specific News (t+1)					
	Num Peers 14-24			*Num Peers = 24*		
	OLS	First Stage	IV	OLS	First Stage	IV
Specific ESG Metric	0.1444***		0.9788***	0.1272***		0.9875***
	(9.66)		(9.96)	(5.56)		(6.84)
Fraction Marg. Peers - Same Metric		0.4464***			0.4569***	
		(23.95)			(19.24)	
Fraction Marg. Non-peers - Same Metric	0.4597***	0.3558***	0.0064	0.5499***	0.3741***	0.0531
	(13.76)	(21.87)	(0.11)	(11.31)	(17.11)	(0.57)
Abs Sales Distance (Peers-Non-peers)	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000
	(-1.00)	(1.32)	(-0.79)	(-0.70)	(1.18)	(-0.76)
Abs Sales Distance X Fraction Marg. Peers - Same Metric	0.0000***	-0.0000	-0.0000	0.0000	-0.0000***	-0.0000
	(3.49)	(-0.90)	(-0.85)	(1.35)	(-2.74)	(-0.86)
Std. Metric-Specific News	0.4727***	0.0030***	0.4702***	0.4841***	0.0029***	0.4819***
	(117.99)	(6.65)	(116.72)	(81.54)	(4.23)	(80.40)
Std. Metric-Specific News	0.1676***	0.0034***	0.1648***	0.1691***	0.0050***	0.1649***
	(46.71)	(6.78)	(45.46)	(31.05)	(6.41)	(29.66)
Std. All Categories Pulse News	-0.0187***	-0.0009*	-0.0184***	-0.0185***	-0.0005	-0.0187***
	(-5.70)	(-1.92)	(-5.59)	(-3.95)	(-0.72)	(-3.98)
Below Avg ESG Rank	0.0025	0.0001	0.0022	0.0093	-0.0002	0.0097
	(0.37)	(0.07)	(0.32)	(0.90)	(-0.13)	(0.93)
Inst Block Own	-0.0532*	0.0005	-0.0525*	-0.0116	0.0107*	-0.0199
	(-1.76)	(0.13)	(-1.74)	(-0.26)	(1.80)	(-0.45)
Large Non-Inst Block	0.0473***	-0.0008	0.0485***	0.0381	-0.0021	0.0421
	(3.23)	(-0.30)	(3.29)	(1.24)	(-0.56)	(1.34)
Observations	198,511	240,573	198,511	85,709	114,668	85,709
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.412	0.201	0.338	0.422	0.216	0.347
F-stat First Stage		573.7			370.1	

Table 8. Effect of ESG metrics on ESG performance

This table presents estimates of the effect of ESG metrics on firm ESG performance. Panel A examines overall ESG performance measured by all categories ESG news, while Panel B examines material ESG performance measured by material ESG news. The dependent variables are standardized ESG performance measures in year t+1. In both panels, columns 1 and 5 present OLS estimates with industry, year, and country fixed effects; columns 2 and 6 present OLS estimates with firm and year fixed effects; columns 3 and 7 present first-stage regressions; columns 4 and 8 present second-stage IV estimates with firm and year fixed effects, where the instrument is the number of ESG metrics used by marginal ISS peers (firms just above the ISS peer selection threshold). Both panels include distance controls that account for sales similarity between marginal peers and marginal non-peers. Columns 1-4 use firms with at least 14 peers (ISS minimum threshold), while columns 5-8 restrict the sample to firms with exactly 24 peers (ISS's target peer group size). Standard errors are clustered by firm. *** p<0.01, ** p<0.05, * p<0.1.

Panel A. The Effect of ESG Metrics on Overall ESG Performance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Num Peers 14-24				*Num Peers = 24*			
	Max All Cat Pulse (t+1)							
	OLS	OLS	First Stage	IV	OLS	OLS	First Stage	IV
Number of ESG Metrics	-0.0094	-0.0315***		0.1557	-0.0103	-0.0415***		0.5529
	(-1.13)	(-2.75)		(0.49)	(-1.00)	(-2.72)		(1.26)
Marg. Peers' ESG Metrics			0.1026***				0.1161***	
			(4.49)				(4.25)	
Marg. Non-peers' ESG Metrics	-0.0402***	-0.0256	0.0853***	-0.0435	-0.0256	-0.0178	0.1075***	-0.0831
	(-2.81)	(-1.52)	(4.57)	(-1.28)	(-1.38)	(-0.81)	(4.78)	(-1.62)
Abs Sales Distance (Peers-Non-peers)	-0.0000*	0.0000	-0.0000	0.0000	-0.0000***	0.0000	-0.0000	0.0000
	(-1.85)	(0.18)	(-1.60)	(0.40)	(-4.14)	(1.48)	(-1.21)	(1.63)
Abs Sales Distance X Marg. Peers' ESG Metrics	-0.0000***	-0.0000***	0.0000***	-0.0000*	-0.0000*	-0.0000***	0.0000	-0.0000***
	(-3.91)	(-2.77)	(3.37)	(-1.95)	(-1.79)	(-3.24)	(0.24)	(-3.07)
Log Total Compensation	0.0362***	0.0280**	-0.0100	0.0288**	0.0311***	0.0145	-0.0172*	0.0197
	(4.22)	(2.46)	(-1.24)	(2.54)	(2.59)	(0.88)	(-1.80)	(1.17)
3-Year Return (t-1)	-0.0001	-0.0001	0.0004*	-0.0002	-0.0004*	-0.0005	0.0004*	-0.0009*
	(-0.34)	(-0.34)	(1.72)	(-0.58)	(-1.92)	(-1.42)	(1.70)	(-1.78)
ROA (t-1)	-0.1330**	-0.0774	0.0896**	-0.1005	-0.2009***	-0.1703	0.1255**	-0.2581
	(-2.42)	(-0.70)	(2.18)	(-0.84)	(-3.12)	(-1.16)	(2.34)	(-1.53)
Log Market Cap (t-1)	0.0441***	0.0377**	-0.0378**	0.0444**	0.0638***	0.0741***	-0.0540***	0.1031***
	(6.40)	(1.99)	(-2.56)	(2.00)	(6.96)	(2.99)	(-2.94)	(2.96)
All Categories ESG Performance (t-1)	0.3269***	-0.0658***	-0.0093**	-0.0657***	0.3208***	-0.0696***	-0.0101*	-0.0686***
	(33.84)	(-7.31)	(-1.97)	(-7.26)	(28.19)	(-6.19)	(-1.70)	(-5.83)
Below Avg ESG Rank (t-1)	-0.0204	0.0581***	-0.0024	0.0564***	-0.0160	0.0711***	-0.0080	0.0683**
	(-1.17)	(3.04)	(-0.16)	(2.87)	(-0.74)	(2.83)	(-0.47)	(2.50)
Inst Block Own (t-1)	0.1857***	0.0324	-0.0558	0.0421	0.2298***	0.0139	-0.0421	0.0410
	(3.42)	(0.42)	(-1.25)	(0.53)	(3.51)	(0.14)	(-0.75)	(0.39)
Large Non-Inst Block (t-1)	-0.0001	-0.0531	0.0256	-0.0560	0.0051	-0.0680	0.0018	-0.0738
	(-0.00)	(-1.39)	(1.00)	(-1.45)	(0.23)	(-1.42)	(0.05)	(-1.44)
Observations	22,774	22,646	26,451	22,646	15,044	14,555	17,232	14,555
R-squared	0.187	0.486	0.642	-0.006	0.198	0.516	0.651	-0.124
Industry FE	YES	NO	NO	NO	YES	NO	NO	NO
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Country FE	YES	NO	NO	NO	YES	NO	NO	NO
Firm FE	NO	YES	YES	YES	NO	YES	YES	YES
Adjusted R2	0.184	0.383	0.576	-0.00638	0.194	0.395	0.569	-0.124
F-stat First Stage			20.20				18.03	

Panel B. The Effect of ESG Metrics on *Material* ESG Performance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Num Peers 14-24				*Num Peers = 24*			
	Max All Materiality Pulse (t+1)							
	OLS	OLS	First Stage	IV	OLS	OLS	First Stage	IV
Number of ESG Metrics	0.0136	-0.0088		0.2386	0.0196	-0.0161		0.5511
	(1.42)	(-0.78)		(0.73)	(1.64)	(-1.11)		(1.28)
Marg. Peers' ESG Metrics			0.1026***				0.1161***	
			(4.49)				(4.25)	
Marg. Non-peers' ESG Metrics	-0.0351**	-0.0116	0.0853***	-0.0352	-0.0248	-0.0081	0.1075***	-0.0703
	(-2.17)	(-0.72)	(4.57)	(-1.02)	(-1.20)	(-0.38)	(4.78)	(-1.41)
Abs Sales Distance (Peers-Non-peers)	-0.0000***	0.0000	-0.0000	0.0000	-0.0000***	0.0000	-0.0000	0.0000
	(-2.65)	(0.18)	(-1.60)	(0.43)	(-4.25)	(1.21)	(-1.21)	(1.57)
Abs Sales Distance X Marg. Peers' ESG Metrics	-0.0000	-0.0000*	0.0000***	-0.0000	0.0000	-0.0000	0.0000	-0.0000
	(-0.13)	(-1.83)	(3.37)	(-1.59)	(1.35)	(-1.20)	(0.24)	(-1.49)
Log Total Compensation	0.0497***	0.0302***	-0.0100	0.0303***	0.0406***	0.0143	-0.0172*	0.0195
	(4.64)	(2.91)	(-1.24)	(2.94)	(2.71)	(0.96)	(-1.80)	(1.25)
3-Year Return (t-1)	-0.0004	-0.0004	0.0004*	-0.0006*	-0.0007*	-0.0006**	0.0004*	-0.0009**
	(-1.33)	(-1.55)	(1.72)	(-1.73)	(-1.80)	(-2.20)	(1.70)	(-2.52)
ROA (t-1)	-0.2533***	-0.0476	0.0896**	-0.0787	-0.2506**	-0.0600	0.1255**	-0.1425
	(-2.94)	(-0.51)	(2.18)	(-0.76)	(-2.23)	(-0.45)	(2.34)	(-0.95)
Log Market Cap (t-1)	0.0749***	0.0741***	-0.0378**	0.0832***	0.0952***	0.1069***	-0.0540***	0.1358***
	(8.69)	(4.01)	(-2.56)	(3.76)	(8.54)	(4.67)	(-2.94)	(4.16)
All Categories ESG Performance (t-1)	0.2807***	0.0004	-0.0093**	0.0005	0.2828***	0.0071	-0.0101*	0.0086
	(28.20)	(0.05)	(-1.97)	(0.06)	(24.76)	(0.65)	(-1.70)	(0.75)
Below Avg ESG Rank (t-1)	-0.0704***	0.0294*	-0.0024	0.0269	-0.0763***	0.0246	-0.0080	0.0224
	(-3.66)	(1.67)	(-0.16)	(1.46)	(-3.17)	(1.07)	(-0.47)	(0.89)
Inst Block Own (t-1)	-0.0163	0.0414	-0.0558	0.0542	0.0278	0.0903	-0.0421	0.1157
	(-0.25)	(0.57)	(-1.25)	(0.72)	(0.35)	(0.95)	(-0.75)	(1.15)
Large Non-Inst Block (t-1)	-0.0056	-0.0147	0.0256	-0.0182	0.0017	-0.0240	0.0018	-0.0284
	(-0.23)	(-0.39)	(1.00)	(-0.47)	(0.06)	(-0.49)	(0.05)	(-0.54)
Observations	21,723	21,568	26,451	21,568	14,309	13,805	17,232	13,805
R-squared	0.206	0.573	0.642	-0.026	0.219	0.601	0.651	-0.140
Industry FE	YES	NO	NO	NO	YES	NO	NO	NO
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Country FE	YES	NO	NO	NO	YES	NO	NO	NO
Firm FE	NO	YES	YES	YES	NO	YES	YES	YES
Adjusted R2	0.204	0.487	0.576	-0.0255	0.216	0.500	0.569	-0.140
F-stat First Stage			20.20				18.03	

Table 9. Say-on-pay votes

This table presents an analysis of the relationship between say-on-pay votes and the number of compensation metrics used in CEO contracts. Panel A reports OLS regressions of the effects of different metric types (ESG, operating, earnings, and market-related metrics) on say-on-pay approval rates. Panel B presents instrumental variable estimates where we instrument a firm's number of individual metrics using the corresponding metrics of its marginal ISS peers (those just above the ISS peer selection threshold), controlling for the number of metrics used by marginal non-peers (those just below the ISS threshold). Columns 1-3 use firms with at least 14 peers (minimum ISS threshold), while columns 4-6 restrict the sample to firms with exactly 24 peers. We also include distance controls that account for the sales similarity between marginal peers and marginal non-peers. All regressions include lagged firm controls and contemporaneous total CEO compensation. All models include year, industry, and country fixed effects. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

Panel A. Say-on-pay votes and individual metrics

	(1)	(2)	(3)	(4)	(5)
	Say-on-Pay Approval Rate				
Num Indiv. Metrics	0.0020***	0.0024***	0.0025**	0.0017**	0.0017**
	(2.92)	(2.66)	(2.57)	(2.24)	(2.37)
Num ESG Metrics		-0.0015			
		(-0.90)			
Num Operating Metrics			-0.0011		
			(-0.66)		
Num Earnings Metrics				0.0020	
				(0.88)	
Market metric					0.0026
					(1.06)
3-yr Return	0.0005***	0.0005***	0.0005***	0.0005***	0.0005***
	(5.88)	(5.88)	(5.88)	(5.88)	(5.88)
Log Mkt Cap	0.0083***	0.0083***	0.0083***	0.0083***	0.0083***
	(6.37)	(6.36)	(6.33)	(6.30)	(6.32)
Total Comp	-0.0215***	-0.0215***	-0.0215***	-0.0215***	-0.0215***
	(-8.85)	(-8.87)	(-8.85)	(-8.88)	(-8.85)
All Categories Pulse News	0.0001**	0.0001**	0.0001**	0.0001**	0.0001**
	(2.23)	(2.21)	(2.23)	(2.21)	(2.22)
Below Avg ESG Rank	-0.0075***	-0.0075***	-0.0075***	-0.0075***	-0.0075***
	(-3.32)	(-3.32)	(-3.33)	(-3.31)	(-3.33)
Inst Block Own	0.0468***	0.0466***	0.0467***	0.0465***	0.0466***
	(6.21)	(6.19)	(6.18)	(6.17)	(6.18)
Large Non-Inst Block	0.0031	0.0032	0.0032	0.0032	0.0033
	(0.91)	(0.93)	(0.93)	(0.93)	(0.95)
Observations	24,817	24,817	24,817	24,817	24,817
Year FE	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES
Adjusted R2	0.0495	0.0495	0.0495	0.0495	0.0495

Panel B. Say-on-pay votes - Marginal Peers IV Analysis

	(1)	(2)	(3)	(4)	(5)	(6)
	Say-on-Pay Approval Rate					
	Num Peers 14-24			*Num Peers = 24*		
	OLS	First Stage	IV	OLS	First Stage	IV
Number of Indiv. Metrics	0.0019***		0.0183**	0.0016*		0.0350**
	(2.96)		(2.38)	(1.95)		(2.38)
Marg. Peers' Num Metrics		0.1590***			0.1363***	
		(9.03)			(6.14)	
Marg. Non-peers' Num Metrics	0.0018*	0.1150***	-0.0006	0.0017	0.1156***	-0.0027
	(1.87)	(6.73)	(-0.44)	(1.40)	(5.38)	(-1.26)
Abs Sales Distance (Peers-Non-peers)	0.0000	-0.0000	0.0000*	-0.0000	0.0000	0.0000
	(1.09)	(-0.26)	(1.88)	(-0.70)	(0.12)	(0.50)
Abs Sales Distance X Marg. Peers' Num Metrics	-0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000
	(-0.67)	(0.15)	(-1.47)	(0.60)	(-0.86)	(-0.08)
3-Year Return	0.0004***	-0.0038***	0.0004***	0.0003***	-0.0033***	0.0004***
	(4.55)	(-5.13)	(4.47)	(2.61)	(-3.68)	(2.82)
Log Mkt Cap	0.0086***	0.1042***	0.0065***	0.0094***	0.0734***	0.0061**
	(6.46)	(5.52)	(3.78)	(5.54)	(2.92)	(2.43)
All Categories Pulse News	0.0001**	0.0030***	0.0000	0.0001	0.0034***	-0.0001
	(2.02)	(3.83)	(0.84)	(0.97)	(3.37)	(-0.71)
Below Avg ESG Rank	-0.0051**	0.0225	-0.0054**	-0.0035	0.0252	-0.0043
	(-2.44)	(0.64)	(-2.43)	(-1.33)	(0.56)	(-1.35)
Inst Block Own	0.0470***	0.0917	0.0456***	0.0382***	0.2019	0.0330***
	(6.68)	(0.78)	(6.15)	(4.33)	(1.33)	(3.10)
Large Non-Inst Block	0.0044	-0.4146***	0.0103**	0.0008	-0.4087***	0.0121*
	(1.48)	(-9.23)	(2.47)	(0.21)	(-7.53)	(1.81)
Total Comp	-0.0189***	0.1732***	-0.0218***	-0.0207***	0.2311***	-0.0283***
	(-8.50)	(6.92)	(-8.04)	(-7.23)	(7.46)	(-6.18)
Observations	21,375	26,386	21,375	12,172	15,010	12,172
R-squared	0.052	0.244	-0.027	0.049	0.236	-0.232
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.0489			0.0436		
F-stat First Stage		81.52			37.65	

Table 10. Compensation metrics and say-on-pay votes dissent

This table presents OLS regressions of the number of broad metric types (ESG, operating, earnings, and market) and number of individual metrics on say-on-pay shareholder dissent, using both one-year and three-year rolling averages of votes against say-on-pay proposals. All regressions include lagged firm controls and firm and year fixed effects. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)
	Num Metric Types		Num Indiv. Metrics	
Mean Say-on-Pay Against Vote	0.1402***		0.2485***	
	(2.96)		(2.94)	
3-yr Mean Say-on-Pay Against Vote		0.3358***		0.5279***
		(3.92)		(3.41)
3-yr Return	-0.0003	-0.0004	-0.0006	-0.0006
	(-0.91)	(-1.28)	(-1.07)	(-1.38)
Log Mkt Cap	0.0631***	0.0728***	0.0356	0.0500*
	(3.41)	(4.24)	(1.09)	(1.68)
All Categories Pulse News	0.0003	0.0003	0.0000	-0.0000
	(0.81)	(0.96)	(0.02)	(-0.03)
Below Avg ESG Rank	0.0029	0.0004	-0.0037	-0.0030
	(0.21)	(0.03)	(-0.14)	(-0.12)
Inst Block Own	0.1992***	0.1936***	0.2501**	0.2155**
	(3.28)	(3.28)	(2.35)	(2.12)
Large Non-Inst Block	-0.0367	-0.0369	0.0563	0.0429
	(-1.00)	(-1.09)	(0.85)	(0.71)
Observations	23,869	26,201	23,869	26,201
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Adjusted R2	0.705	0.717	0.690	0.697

Table 11. ESG and other shareholder proposals

This table presents analysis of ESG proposals (Panels A and B) and shareholder proposals (Panel C) as a function of various compensation metrics included in the CEO contract. Panel A presents OLS estimates relating ESG proposals to different metric types, where *ESG Proposal* is an indicator equal to one if a firm receives at least one shareholder-sponsored ESG proposal in a given year. Panel B presents instrumental variable estimates where we instrument a firm's use of ESG metrics using the corresponding metrics of its ISS marginal peers (those just above the ISS peer selection threshold), controlling for the number of metrics used by marginal non-peers (those just below the ISS threshold). Panel C examines all shareholder proposals; *Shareholder Proposal* is an indicator equal to one if a firm receives at least one shareholder-sponsored proposal in a given year. The firm's number of individual metrics is instrumented using the number of individual metrics used by its ISS marginal peers. For Panels B and C, columns 1-3 restrict the sample to firms with at least 14 peers (minimum ISS threshold), while columns 4-6 use firms with exactly 24 ISS peers. All specifications in Panels B and C include distance controls that account for the sales similarity between marginal peers and marginal non-peers. All regressions include lagged firm controls and contemporaneous total CEO compensation. All models include year, industry, and country fixed effects. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

Panel A. ESG proposals

	(1)	(2)	(3)	(4)
	ESG Proposal			
ESG Metric	-0.0227***	-0.0160***		
	(-3.78)	(-2.68)		
Material ESG Metric			-0.0258***	-0.0195***
			(-3.40)	(-2.59)
Operating Metric		-0.0180***		-0.0188***
		(-3.71)		(-3.83)
Earnings Metric		-0.0202***		-0.0194***
		(-2.97)		(-2.83)
Market Metric		-0.0095*		-0.0096*
		(-1.90)		(-1.91)
3-Year Return	-0.0004***	-0.0004***	-0.0004***	-0.0004***
	(-4.60)	(-4.59)	(-4.51)	(-4.51)
Log Mkt Cap	0.0372***	0.0387***	0.0372***	0.0387***
	(11.80)	(12.10)	(11.75)	(12.05)
Total Comp	-0.0033	-0.0016	-0.0033	-0.0016
	(-0.73)	(-0.36)	(-0.73)	(-0.35)
All Categories Pulse News	-0.0007***	-0.0006***	-0.0007***	-0.0007***
	(-6.43)	(-6.20)	(-6.51)	(-6.26)
Below Avg ESG Rank	0.0017	0.0017	0.0019	0.0018
	(0.33)	(0.33)	(0.36)	(0.34)
Inst Block Own	-0.1355***	-0.1288***	-0.1364***	-0.1300***
	(-9.79)	(-9.45)	(-9.68)	(-9.35)
Large Non-Inst Block	0.0072	0.0037	0.0071	0.0036
	(1.32)	(0.68)	(1.29)	(0.66)
Observations	30,333	30,333	30,002	30,002
R-squared	0.304	0.306	0.303	0.305
Year FE	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Country FE	YES	YES	YES	YES
Adjusted R2	0.303	0.304	0.302	0.303

Panel B. ESG Proposals - Marginal Peers IV Analysis

	(1)	(2)	(3)	(4)	(5)	(6)
	ESG Proposal					
		Num Peers 14-24			*Num Peers = 24*	
	OLS	First Stage	IV	OLS	First Stage	IV
ESG Metric	-0.0187***		-0.2344*	-0.0169***		-0.2369
	(-3.16)		(-1.84)	(-2.58)		(-1.25)
Marg. Peers' Num Metrics		0.0191***			0.0147***	
		(4.97)			(3.27)	
Marg. Non-peers' Num Metrics	-0.0062***	0.0186***	-0.0014	-0.0068***	0.0172***	-0.0023
	(-2.94)	(5.14)	(-0.39)	(-2.89)	(4.02)	(-0.55)
Abs Sales Distance (Peers-Non-peers)	0.0000**	0.0000	0.0000**	0.0000	-0.0000	0.0000
	(2.39)	(0.05)	(2.08)	(0.46)	(-0.20)	(0.22)
Abs Sales Distance X Marg. Peers' Num Metrics	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(-0.30)	(0.76)	(0.15)	(0.95)	(0.32)	(1.02)
3-Year Return	-0.0002**	-0.0006***	-0.0003**	0.0001	-0.0005**	-0.0000
	(-2.03)	(-3.64)	(-2.26)	(1.18)	(-2.32)	(-0.03)
Log Mkt Cap	0.0202***	0.0046	0.0221***	0.0124***	0.0052	0.0142***
	(8.00)	(1.32)	(7.54)	(4.71)	(1.06)	(4.11)
All Categories Pulse News	-0.0002***	0.0005***	-0.0001	-0.0002	0.0004**	-0.0001
	(-2.60)	(3.40)	(-1.13)	(-1.56)	(2.37)	(-0.50)
Below Avg ESG Rank	0.0067	0.0128*	0.0095*	0.0075	0.0130	0.0104
	(1.35)	(1.75)	(1.71)	(1.34)	(1.45)	(1.62)
Inst Block Own	-0.0621***	-0.0410*	-0.0704***	-0.0416***	-0.0440	-0.0507***
	(-5.07)	(-1.72)	(-4.92)	(-2.90)	(-1.42)	(-2.86)
Large Non-Inst Block	0.0068	-0.0456***	-0.0031	-0.0009	-0.0472***	-0.0112
	(1.26)	(-5.03)	(-0.37)	(-0.15)	(-4.31)	(-1.01)
Total Comp	-0.0003	0.0096***	0.0018	0.0009	0.0068	0.0024
	(-0.09)	(2.76)	(0.50)	(0.32)	(1.27)	(0.72)
Observations	26,386	26,386	26,386	15,010	15,010	15,010
R-squared	0.272	0.247	-0.069	0.310	0.268	-0.116
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.270			0.307		
F-stat First Stage		24.71			10.67	

Panel C. Shareholder Proposals - Marginal Peers IV Analysis

	(1)	(2)	(3)	(4)	(5)	(6)
	Shareholder Proposal					
		Num Peers 14-24			*Num Peers = 24*	
	OLS	First Stage	IV	OLS	First Stage	IV
Number of Indiv. Metrics	-0.0046**		-0.0594***	-0.0076***		-0.0422*
	(-2.43)		(-3.22)	(-3.63)		(-1.69)
Marg. Peers' Num Metrics		0.1590***			0.1363***	
		(9.03)			(6.14)	
Marg. Non-peers' Num Metrics	-0.0042	0.1150***	0.0039	-0.0062*	0.1156***	-0.0011
	(-1.44)	(6.73)	(1.00)	(-1.86)	(5.38)	(-0.23)
Abs Sales Distance (Peers-Non-peers)	0.0000**	-0.0000	0.0000	0.0000	0.0000	0.0000
	(2.12)	(-0.26)	(1.44)	(0.24)	(0.12)	(0.07)
Abs Sales Distance X Marg. Peers' Num Metrics	0.0000	0.0000	0.0000	0.0000	-0.0000	0.0000
	(0.34)	(0.15)	(0.83)	(1.16)	(-0.86)	(1.24)
3-Year Return	-0.0005***	-0.0038***	-0.0007***	-0.0002*	-0.0033***	-0.0003**
	(-4.90)	(-5.13)	(-4.71)	(-1.91)	(-3.68)	(-2.07)
Log Mkt Cap	0.0435***	0.1042***	0.0510***	0.0365***	0.0734***	0.0401***
	(13.19)	(5.52)	(11.18)	(8.95)	(2.92)	(7.81)
All Categories Pulse News	-0.0003**	0.0030***	-0.0001	-0.0001	0.0034***	0.0000
	(-2.11)	(3.83)	(-0.66)	(-0.65)	(3.37)	(0.18)
Below Avg ESG Rank	0.0088	0.0225	0.0101	0.0152**	0.0252	0.0162**
	(1.35)	(0.64)	(1.47)	(1.97)	(0.56)	(2.04)
Inst Block Own	-0.1483***	0.0917	-0.1420***	-0.1267***	0.2019	-0.1188***
	(-8.20)	(0.78)	(-7.45)	(-5.84)	(1.33)	(-5.19)
Large Non-Inst Block	-0.0003	-0.4146***	-0.0231**	-0.0055	-0.4087***	-0.0195
	(-0.04)	(-9.23)	(-2.13)	(-0.69)	(-7.53)	(-1.49)
Total Comp	0.0026	0.1732***	0.0121**	0.0042	0.2311***	0.0123*
	(0.67)	(6.92)	(2.30)	(0.97)	(7.46)	(1.72)
Observations	26,386	26,386	26,386	15,010	15,010	15,010
R-squared	0.229	0.244	-0.001	0.240	0.236	0.022
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.227			0.237		
F-stat First Stage		81.52			37.65	

Table 12. Opposition against management

This table presents an analysis of shareholder votes against management as a function of CEO compensation metrics. We present instrumental variable estimates where we instrument a firm's number of individual metrics using the corresponding metrics of its ISS marginal peers (those just above the ISS peer selection threshold), controlling for the number of metrics used by the marginal non-peers (those just below the ISS threshold). Columns 1-3 restrict the sample to firms with at least 14 ISS peers, while columns 4-6 use firms with exactly 24 ISS peers. All specifications include distance controls for sales similarity between peers and non-peers. The dependent variable *Vote Against Mgmt* measures the mean percentage of votes cast against management proposals in a given firm-year. All regressions include lagged firm controls, total CEO compensation, and year, industry, and country fixed effects. The t-statistics, with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Vote Against Mgmt					
	Num Peers 14-24			*Num Peers = 24*		
	OLS	First Stage	IV	OLS	First Stage	IV
Number of Indiv. Metrics	-0.0012***		-0.0107***	-0.0012***		-0.0131***
	(-4.31)		(-3.54)	(-3.40)		(-3.01)
Marg. Peers' Num Metrics		0.1590***			0.1363***	
		(9.03)			(6.14)	
Marg. Non-peers' Num Metrics	-0.0004	0.1150***	0.0009	-0.0008	0.1156***	0.0009
	(-0.98)	(6.73)	(1.59)	(-1.49)	(5.38)	(1.20)
Abs Sales Distance (Peers-Non-peers)	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000
	(0.13)	(-0.26)	(-1.25)	(0.38)	(0.12)	(-0.80)
Abs Sales Distance X Marg. Peers' Num Metrics	0.0000	0.0000	0.0000*	-0.0000	-0.0000	0.0000
	(0.50)	(0.15)	(1.72)	(-0.10)	(-0.86)	(0.60)
3-Year Return	-0.0001***	-0.0038***	-0.0001***	-0.0001***	-0.0033***	-0.0001***
	(-4.31)	(-5.13)	(-4.53)	(-2.70)	(-3.68)	(-3.06)
Log Mkt Cap	-0.0065***	0.1042***	-0.0051***	-0.0060***	0.0734***	-0.0047***
	(-14.49)	(5.52)	(-7.60)	(-9.66)	(2.92)	(-5.42)
All Categories Pulse News	-0.0000*	0.0030***	-0.0000	-0.0000	0.0034***	0.0000
	(-1.93)	(3.83)	(-0.62)	(-0.90)	(3.37)	(0.43)
Below Avg ESG Rank	0.0013	0.0225	0.0015	0.0008	0.0252	0.0011
	(1.48)	(0.64)	(1.55)	(0.68)	(0.56)	(0.86)
Inst Block Own	-0.0215***	0.0917	-0.0206***	-0.0189***	0.2019	-0.0166***
	(-6.88)	(0.78)	(-6.15)	(-4.80)	(1.33)	(-3.73)
Large Non-Inst Block	0.0004	-0.4146***	-0.0036**	0.0012	-0.4087***	-0.0036
	(0.31)	(-9.23)	(-1.99)	(0.77)	(-7.53)	(-1.46)
Total Comp	0.0030***	0.1732***	0.0046***	0.0030***	0.2311***	0.0057***
	(4.53)	(6.92)	(5.18)	(3.18)	(7.46)	(4.15)
Observations	24,901	26,386	24,901	14,185	15,010	14,185
R-squared	0.097	0.244	-0.051	0.085	0.236	-0.132
Industry, Year and Country FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.0942			0.0800		
F-stat First Stage		81.52			37.65	

Table 13. Compensation Metrics and Stock Liquidity

This table presents estimates of a firm's stock liquidity as a function of CEO compensation metrics. The dependent variable is the relative bid-ask spread during year t+1, calculated as (Ask–Bid)/((Ask+Bid)/2) using daily bid and ask prices and averaging over the year. We present instrumental variable estimates where we instrument a firm's metrics using the corresponding metrics of its ISS marginal peers (those just above the ISS peer selection threshold), controlling for the number of metrics used by marginal non-peers (those just below the ISS threshold). Columns 1-3 restrict the sample to firms with at least 14 ISS peers, while columns 4-6 use firms with exactly 24 ISS peers. All specifications include distance controls for sales similarity between peers and non-peers. All regressions include lagged firm controls, total CEO compensation, and firm and year fixed effects. Standard errors are clustered by firm. *** p<0.01, ** p<0.05, * p<0.1.

	(1)	(2)	(3)	(4)	(5)	(6)
	Relative Bid-Ask Spread (t+1)					
	Num Peers 14-24			*Num Peers = 24*		
	OLS	First Stage	IV	OLS	First Stage	IV
Number of Indiv. Metrics	0.000022		-0.000232	0.000041		-0.000897
	(0.79)		(-0.43)	(1.16)		(-1.23)
Marg. Peers' Num Metrics		0.0642***			0.0671***	
		(5.27)			(4.61)	
Marg. Non-peers' Num Metrics	-0.000074**	0.0570***	-0.000062	-0.000097**	0.0502***	-0.000065
	(-2.16)	(4.83)	(-1.62)	(-2.34)	(3.52)	(-1.36)
Abs Sales Distance (Peers-Non-peers)	0.000000***	-0.0000*	0.000000***	0.000000**	-0.0000	0.000000
	(3.92)	(-1.65)	(3.34)	(2.03)	(-1.28)	(0.40)
Abs Sales Distance X Marg. Peers' Num Metrics	-0.000000***	0.0000**	-0.000000**	-0.000000**	0.0000	-0.000000
	(-4.34)	(2.12)	(-2.56)	(-2.48)	(1.08)	(-0.27)
Total Comp	-0.000049	0.0606***	-0.000036	-0.000074	0.0725***	-0.000010
	(-0.85)	(3.72)	(-0.53)	(-0.79)	(3.31)	(-0.08)
3-Year Return	-0.000002	-0.0004	-0.000002	0.000001	0.0001	0.000001
	(-1.51)	(-1.06)	(-1.52)	(0.57)	(0.22)	(0.74)
ROA	-0.001374*	0.0619	-0.001352*	-0.000622	0.2472	-0.000489
	(-1.93)	(0.55)	(-1.90)	(-0.91)	(1.62)	(-0.72)
Log Mkt Cap	-0.001788***	-0.0996***	-0.001817***	-0.001980***	-0.1267***	-0.002091***
	(-16.22)	(-3.30)	(-13.60)	(-13.57)	(-3.31)	(-11.14)
All Categories Pulse News	-0.000002	-0.0006	-0.000002	-0.000001	-0.0009	-0.000002
	(-1.14)	(-1.08)	(-1.19)	(-0.46)	(-1.43)	(-0.81)
Below Avg ESG Rank	0.000088	-0.0220	0.000085	0.000033	-0.0184	0.000027
	(1.47)	(-0.96)	(1.40)	(0.41)	(-0.65)	(0.32)
Inst Block Own	0.000646*	-0.2470***	0.000595*	0.000803*	-0.3052***	0.000628
	(1.94)	(-2.67)	(1.68)	(1.90)	(-2.69)	(1.36)
Large Non-Inst Block	0.000449***	-0.0052	0.000450***	0.000499**	-0.0328	0.000459**
	(2.67)	(-0.10)	(2.68)	(2.23)	(-0.52)	(1.98)
Observations	24,591	30,844	24,591	15,820	20,052	15,820
R-squared	0.845	0.719	0.071	0.853	0.733	-0.009
Firm and Year FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.817	0.671	0.0714	0.819	0.672	-0.00916
F-stat First Stage		27.76			21.22	

Table 14. Compensation Metrics and Analyst Forecasts

This table presents explores the effect of CEO compensation metrics on the firms' information environment, evaluated using analysts' forecasts. Panel A examines analyst consensus dispersion, where the dependent variable is the standard deviation of analyst EPS forecasts divided by the absolute value of the median consensus in year t+1. Panel B examines forecast accuracy, where the dependent variable is the absolute forecast error (|Actual - Median consensus|) scaled by the absolute value of the median consensus in year t+1. Panel C examines earnings surprises, where the dependent variable is the absolute standardized unexpected earnings (SUE), calculated as the absolute forecast error scaled by the standard deviation of analyst forecasts in year t+1. Analyst measures use annual EPS forecasts from IBES, limiting the sample to firm-years with at least three analysts, where consensus is measured as the median of the last forecast issued by each analyst before the earnings announcement. All panels present instrumental variable estimates where we instrument a firm's number of individual metrics using the corresponding metrics of its ISS marginal peers (those just above the ISS peer selection threshold), controlling for the number of metrics used by marginal non-peers (those just below the ISS threshold). Columns 1-3 restrict the sample to firms with at least 14 ISS peers, while columns 4-6 use firms with exactly 24 ISS peers. All specifications include distance controls for sales similarity between peers and non-peers. All regressions include lagged firm controls, total CEO compensation, and firm and year fixed effects. Standard errors are clustered by firm. *** p<0.01, ** p<0.05, * p<0.1.

Panel A. Analyst Consensus Dispersion

	(1)	(2)	(3)	(4)	(5)	(6)
	Analyst Consensus Dispersion (t+1)					
	Num Peers 14-24			*Num Peers = 24*		
	OLS	First Stage	IV	OLS	First Stage	IV
Number of Indiv. Metrics	-0.013290*		-0.025522	-0.017522*		-0.263527
	(-1.67)		(-0.13)	(-1.80)		(-0.97)
Marg. Peers' Num Metrics		0.0642***			0.0671***	
		(5.27)			(4.61)	
Marg. Non-peers' Num Metrics	-0.014495	0.0570***	-0.014064	-0.015479	0.0502***	-0.003472
	(-1.37)	(4.83)	(-1.14)	(-1.21)	(3.52)	(-0.21)
Abs Sales Distance (Peers-Non-peers)	0.000000	-0.0000*	0.000000	0.000000	-0.0000	0.000000
	(0.20)	(-1.65)	(0.18)	(1.57)	(-1.28)	(0.95)
Abs Sales Distance X Marg. Peers' Num Metrics	0.000000	0.0000**	0.000000	-0.000000	0.0000	-0.000000
	(0.68)	(2.12)	(0.67)	(-1.16)	(1.08)	(-0.34)
Total Comp	0.011952	0.0606***	0.012889	0.018387	0.0725***	0.042293
	(0.75)	(3.72)	(0.58)	(0.68)	(3.31)	(1.05)
3-Year Return	-0.000380	-0.0004	-0.000381	-0.000403	0.0001	-0.000339
	(-1.18)	(-1.06)	(-1.18)	(-1.23)	(0.22)	(-1.07)
ROA	-0.169934	0.0619	-0.167668	-0.367042**	0.2472	-0.267755
	(-1.40)	(0.55)	(-1.32)	(-2.21)	(1.62)	(-1.34)
Log Mkt Cap	-0.080044***	-0.0996***	-0.082402*	-0.083127***	-0.1267***	-0.131709**
	(-3.34)	(-3.30)	(-1.94)	(-2.76)	(-3.31)	(-2.27)
All Categories Pulse News	0.000458	-0.0006	0.000452	0.000559	-0.0009	0.000147
	(1.07)	(-1.08)	(1.04)	(0.99)	(-1.43)	(0.19)
Below Avg ESG Rank	-0.019981	-0.0220	-0.020120	0.003137	-0.0184	0.000603
	(-1.09)	(-0.96)	(-1.10)	(0.14)	(-0.65)	(0.02)
Inst Block Own	0.232759***	-0.2470***	0.229913**	0.250900**	-0.3052***	0.202397*
	(2.92)	(-2.67)	(2.48)	(2.49)	(-2.69)	(1.80)
Large Non-Inst Block	0.017756	-0.0052	0.016989	0.009465	-0.0328	-0.009994
	(0.36)	(-0.10)	(0.33)	(0.16)	(-0.52)	(-0.15)
Observations	16,137	30,844	16,137	10,378	20,052	10,378
R-squared	0.332	0.719	0.005	0.359	0.733	-0.090
Firm and Year FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.206	0.671	0.00535	0.203	0.672	-0.0898
F-stat First Stage		27.76			21.22	

Panel B. Analyst Forecast Accuracy

	(1)	(2)	(3)	(4)	(5)	(6)
	Analyst Forecast Error (t+1)					
		Num Peers 14-24			*Num Peers = 24*	
	OLS	First Stage	IV	OLS	First Stage	IV
Number of Indiv. Metrics	-0.008151		-0.102296	-0.004122		-0.316116
	(-1.37)		(-0.75)	(-0.55)		(-1.56)
Marg. Peers' Num Metrics		0.0642***			0.0671***	
		(5.27)			(4.61)	
Marg. Non-peers' Num Metrics	-0.008491	0.0570***	-0.005176	-0.016459*	0.0502***	-0.001232
	(-1.12)	(4.83)	(-0.58)	(-1.74)	(3.52)	(-0.09)
Abs Sales Distance (Peers-Non-peers)	-0.000000	-0.0000*	-0.000000	-0.000000	-0.0000	-0.000000
	(-1.10)	(-1.65)	(-1.20)	(-0.26)	(-1.28)	(-1.06)
Abs Sales Distance X Marg. Peers' Num Metrics	0.000000	0.0000**	0.000000	0.000000	0.0000	0.000000
	(1.13)	(2.12)	(1.18)	(0.09)	(1.08)	(0.97)
Total Comp	0.003038	0.0606***	0.010251	-0.006324	0.0725***	0.023994
	(0.34)	(3.72)	(0.76)	(-0.49)	(3.31)	(0.94)
3-Year Return	-0.000426*	-0.0004	-0.000431*	-0.000344	0.0001	-0.000262
	(-1.79)	(-1.06)	(-1.84)	(-1.54)	(0.22)	(-1.04)
ROA	-0.106491	0.0619	-0.089052	-0.331554***	0.2472	-0.205634
	(-1.28)	(0.55)	(-1.03)	(-2.70)	(1.62)	(-1.33)
Log Mkt Cap	-0.029247*	-0.0996***	-0.047400	-0.026392	-0.1267***	-0.088005**
	(-1.79)	(-3.30)	(-1.59)	(-1.28)	(-3.31)	(-2.05)
All Categories Pulse News	0.000216	-0.0006	0.000171	0.000184	-0.0009	-0.000339
	(0.64)	(-1.08)	(0.50)	(0.43)	(-1.43)	(-0.58)
Below Avg ESG Rank	0.001238	-0.0220	0.000170	-0.007044	-0.0184	-0.010257
	(0.09)	(-0.96)	(0.01)	(-0.40)	(-0.65)	(-0.50)
Inst Block Own	0.095237*	-0.2470***	0.073334	0.059258	-0.3052***	-0.002256
	(1.78)	(-2.67)	(1.11)	(0.85)	(-2.69)	(-0.02)
Large Non-Inst Block	-0.008536	-0.0052	-0.014442	-0.012002	-0.0328	-0.036680
	(-0.26)	(-0.10)	(-0.43)	(-0.31)	(-0.52)	(-0.75)
Observations	16,137	30,844	16,137	10,378	20,052	10,378
R-squared	0.266	0.719	-0.022	0.303	0.733	-0.266
Firm and Year FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.127	0.671	-0.0224	0.133	0.672	-0.266
F-stat First Stage		27.76			21.22	

Panel C. Standardized Unexpected Earnings (SUE)

	(1)	(2)	(3)	(4)	(5)	(6)
	Standardized Unexpected Earnings (t+1)					
	Num Peers 14-24			*Num Peers = 24*		
	OLS	First Stage	IV	OLS	First Stage	IV
Number of Indiv. Metrics	0.264560		2.330613	0.271909		1.943006
	(1.64)		(0.58)	(1.27)		(0.42)
Marg. Peers' Num Metrics		0.0642***			0.0671***	
		(5.27)			(4.61)	
Marg. Non-peers' Num Metrics	-0.015988	0.0570***	-0.088541	-0.180078	0.0502***	-0.263513
	(-0.07)	(4.83)	(-0.34)	(-0.68)	(3.52)	(-0.74)
Abs Sales Distance (Peers-Non-peers)	0.000000	-0.0000*	0.000000	0.000000	-0.0000	0.000000
	(0.22)	(-1.65)	(0.27)	(0.83)	(-1.28)	(0.92)
Abs Sales Distance X Marg. Peers' Num Metrics	-0.000000	0.0000**	-0.000000	-0.000000	0.0000	-0.000000
	(-1.06)	(2.12)	(-1.11)	(-1.55)	(1.08)	(-1.60)
Total Comp	0.221240	0.0606***	0.065173	-0.374318	0.0725***	-0.533261
	(0.90)	(3.72)	(0.16)	(-1.29)	(3.31)	(-0.98)
3-Year Return	0.018172***	-0.0004	0.018298***	0.014221**	0.0001	0.013819**
	(2.87)	(-1.06)	(2.94)	(2.26)	(0.22)	(2.22)
ROA	6.977687***	0.0619	6.588659***	6.107110***	0.2472	5.419843*
	(4.01)	(0.55)	(3.49)	(2.83)	(1.62)	(1.82)
Log Mkt Cap	1.007718**	-0.0996***	1.403994*	1.269695***	-0.1267***	1.593253
	(2.56)	(-3.30)	(1.65)	(2.79)	(-3.31)	(1.58)
All Categories Pulse News	-0.004215	-0.0006	-0.003360	-0.022233	-0.0009	-0.019611
	(-0.35)	(-1.08)	(-0.28)	(-1.54)	(-1.43)	(-1.22)
Below Avg ESG Rank	0.152723	-0.0220	0.173933	-0.214976	-0.0184	-0.200997
	(0.31)	(-0.96)	(0.36)	(-0.36)	(-0.65)	(-0.34)
Inst Block Own	-1.293701	-0.2470***	-0.788382	-2.298595	-0.3052***	-1.937066
	(-0.73)	(-2.67)	(-0.38)	(-1.03)	(-2.69)	(-0.78)
Large Non-Inst Block	-0.473181	-0.0052	-0.341504	-0.964478	-0.0328	-0.829212
	(-0.56)	(-0.10)	(-0.38)	(-0.93)	(-0.52)	(-0.74)
Observations	16,140	30,844	16,140	10,378	20,052	10,378
R-squared	0.283	0.719	-0.006	0.325	0.733	-0.003
Firm and Year FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.147	0.671	-0.00631	0.161	0.672	-0.00340
F-stat First Stage		27.76			21.22	

Internet Appendix for *Beyond ESG: Executive Pay Metrics and Shareholder Support*

Table IA.D. Dictionary for classifying ESG and other compensation metrics

This appendix lists the set of keywords we use to classify firms' disclosed compensation metrics into broad category types – ESG, earnings, operating, and market metrics and then into 31 specific categories. Compensation data are obtained from Executive Compensation Analytics (ECA) provided by Institutional Shareholder Services (ISS). The international sample includes firms from 34 countries from 2011 to 2021.

ESG Keywords

(1) AAIR (Average Accident Incident Rate)
(2) abatement
(3) abating
(4) Aboriginal
(5) ACCC (Australian Competition and Consumer Commission)
(6) access
(7) accessible
(8) accident
(9) accidents
(10) adopt
(11) adverse
(12) advertising
(13) affordability
(14) affordable
(15) AFR (Accident Frequency Rate)
(16) African
(17) aid
(18) AIFR (All Injury Frequency Rate)
(19) air
(20) AIRR (All Incident Recordable Rate)
(21) alarms
(22) alert
(23) all-electric
(24) all-employee
(25) all-injury
(26) allegations
(27) AML (anti-money laundering)
(28) animal
(29) antibias
(30) antibribery
(31) anticorruption
(32) antidumping
(33) antimicrobial
(34) anti-money
(35) antiracist
(36) antislavery
(37) antitrust
(38) arsenic
(39) ASAOC (Administrative Settlement Agreement and Order on Consent)
(40) assault
(41) assistance
(42) assisting
(43) atmosphere
(44) attitude
(45) attitudes
(46) audit
(47) auditing
(48) auditors
(49) authority's
(50) avoidable
(51) avoidance
(52) awareness
(53) AWRCR (All Worker Recordable Case Rate)
(54) BaCE (Building a Community of Equity)
(55) BAIR (Bristow Aircraft Incident Rate)
(56) BAME (Black, Asian, and Minority Ethnic)
(57) B-BBEE (Broad-Based Black Economic Empowerment)
(58) BEE (Black Economic Empowerment)
(59) behaving
(60) behavior
(61) behavior-based
(62) behavioral
(63) behaviors
(64) beneficial
(65) benefit
(66) BIFR (Brambles Injury Frequency Rate)
(67) bio
(68) biodiversity
(69) biofuel
(70) biomass
(71) biosecurity
(72) BIPOC (Black, Indigenous and People of Color)
(73) black
(74) breach
(75) breaches
(76) BREEAM (Building Research Establishment Environmental Assessment Method)
(77) bribery
(78) BSEE (Bureau of Safety and Environmental Enforcement)
(79) bullying
(80) bushfire
(81) CAHPS (Consumer Assessment of Healthcare Providers and Systems)
(82) CAIDI (Customer Average Interruption Duration Index)
(83) carbon
(84) carcinogens
(85) care
(86) caseload
(87) catastrophic
(88) catchment
(89) CCUS (Carbon Capture, Utilization, and Storage)
(90) CCV (critical control verification)
(91) CDC (Centers for Disease Control and Prevention)
(92) CDIs (Community Development Initiatives)
(93) CDP (Carbon Disclosure Project)
(94) CE marking
(95) Celsius
(96) censure
(97) certificates
(98) certification
(99) certifications
(100) certified
(101) CFC (chlorofluorocarbon)
(102) CFPB (Consumer Financial Protection Bureau)
(103) CG (Corporate Governance)
(104) CGA (Culture, Governance, and Accountability)
(105) chargeable
(106) charitable
(107) charities
(108) charity
(109) CHESM (Contractor Health Environmental Safety Management)
(110) child
(111) CIFR (Critical Incident Frequency Rate)
(112) CIGS (Copper Indium Gallium Selenide)
(113) circular
(114) circularity
(115) citizenship
(116) clean
(117) cleaner
(118) cleantech
(119) climate
(120) climate-positive
(121) climate-related
(122) climates
(123) climatic
(124) CMVI (Controllable Motor Vehicle Incidents)
(125) CNMC (Comisión Nacional de los Mercados y la Competencia)
(126) CO (carbon monoxide)
(127) CO2
(128) CO2 emission
(129) CO2-equivalent
(130) CO2-reduced
(131) CO2 reduction
(132) CO2e
(133) CO2eq
(134) coal-based
(135) coal-exit
(136) collaborate
(137) collaborative
(138) collaboratively
(139) collaborators
(140) colleague
(141) colleagues
(142) collision
(143) collisions
(144) color
(145) colored
(146) commit
(147) committed
(148) committing
(149) communities

(150) community
(151) community-backed
(152) commuting
(153) competition
(154) complaint
(155) complaints
(156) complex-recycling
(157) compliance
(158) compliances
(159) compliant
(160) compliantly
(161) complying
(162) compostable
(163) concerns
(164) conflict
(165) conflicts
(166) conservancy
(167) conservation
(168) consumed
(169) consumer
(170) consumption
(171) contaminated
(172) contamination
(173) cooperation
(174) COP21
(175) CORESafety
(176) corporate social responsibility
(177) corrupt
(178) corruption
(179) coworker
(180) CPMM (crashes per million miles)
(181) CRD (Credit Requirements Directive)
(182) credible
(183) Cree
(184) CRI (Compliance Risk Index)
(185) crime
(186) criticality
(187) CSA (Corporate Sustainability Assessment)
(188) CSAP (Climate Strategy and Action Plan)
(189) CSR (corporate social responsibility)
(190) CTF (Counter-Terrorism Financing)
(191) cultivate
(192) cultural
(193) culture
(194) CVIR (Chargeable Vehicle Incident Rate)
(195) CWI (Community Workforce Initiative)
(196) cyber
(197) cybersecurity
(198) D&I (Diversity and Inclusion)
(199) damage
(200) damages
(201) danger
(202) dangerous
(203) DART (Days Away, Restricted, or Transferred/Days Away Restricted Time)
(204) Days Away Restricted Time
(205) deadly
(206) deaths
(207) decarbonization
(208) decarbonized
(209) decarbonization
(210) DEI (Diversity, Equity, and Inclusion)
(211) demographic
(212) demographics
(213) derailments
(214) dielectric
(215) diesel
(216) DIFR (Disabling Injury Frequency Rate)
(217) dioxide
(218) DIR (Disabling Injury Rate)
(219) disability
(220) disaster
(221) discrimination
(222) disposal
(223) disposals
(224) disturbance
(225) diverse
(226) diversity
(227) DJSI (Dow Jones Sustainability Indices)
(228) DJSIW (Dow Jones Sustainability Index World)
(229) DOJ (Department of Justice)
(230) donations
(231) DOT (Department of Transportation)
(232) drops
(233) e-waste
(234) EACC (Ethics and Anti-Corruption Commission)
(235) e-buses
(236) eco
(237) eco-design
(238) eco-efficient
(239) eco-labeled
(240) ecological
(241) ecologically
(242) ECOLOGO
(243) ecosystem
(244) EcoVadis
(245) educate
(246) educating
(247) education
(248) educational
(249) EEAFR (Environmental Enforcement Action Frequency Rate)
(250) efficiencies
(251) efficiency
(252) efficient
(253) EHS (Environment, Health, and Safety)
(254) EHS-related (Environmental, Health, and Safety-related)
(255) EHSS (Environment, Health, Safety, and Sustainability)
(256) EI (Engagement Index/Environmental Incident)
(257) EIA (Environmental Impact Assessment)
(258) EIR (Environmental Incident Rate)
(259) elearning
(260) electric
(261) electrical
(262) electricity
(263) electrification
(264) ELMUS (Executive-Level Minorities, U.S.)
(265) ELWG (Executive-Level Women, Global)
(266) EMAS (Eco-Management and Audit Scheme)
(267) emergencies
(268) emergency
(269) emission
(270) emissions
(271) emitted
(272) empathetic
(273) employability
(274) employee
(275) employee-based
(276) employee-evaluation
(277) employee-initiated
(278) employee-led
(279) employees
(280) employer
(281) employers
(282) employment
(283) energies
(284) energy
(285) engage
(286) engaged
(287) engagement
(288) engagements
(289) engages
(290) engaging
(291) engender
(292) enjoyable
(293) ENSR (Energia Non Servita di Riferimento)
(294) environment
(295) environment-linked
(296) environmental
(297) environmental-related
(298) environmentally
(299) environmentally-friendly
(300) environments
(301) EOS (employee opinion survey)
(302) EPC (energy performance certificate)
(303) equality
(304) equitable
(305) ergonomic
(306) ERIF (Environmental Recordable Incident Frequency)
(307) ESCG (Environment, Social, and Corporate Governance)
(308) ESCMP (Environmental and Safety Compliance Management Program)
(309) ESE (Environmental, Social, and Economic)
(310) ESG
(311) ESG reporting
(312) ESG targets
(313) ESG-criteria
(314) ESG-dedicated
(315) ESG-integrated
(316) ESG-oriented
(317) ESG-related
(318) ESPC (Energy Savings Performance Contracting)
(319) Ethibel
(320) ethic
(321) ethical
(322) ethically
(323) ethics
(324) EthiFinance
(325) ethnic
(326) ethnically
(327) ethnicity
(328) e-trucks
(329) EV (electric vehicle)
(330) EV charging (electric vehicle charging)
(331) EXI (employee experience index)
(332) fair
(333) fairly
(334) family
(335) fatal
(336) fatalities
(337) fatality
(338) fatigue
(339) fatigue-violation
(340) FCA (Financial Conduct Authority)
(341) FCPA (Foreign Corrupt Practices Act)
(342) female
(343) female-owned
(344) females
(345) feminization
(346) feminizing
(347) fiduciary
(348) FIR (Fatality Incident Rate)

(349) fire
(350) fire-related
(351) fires
(352) Fitwel
(353) flooding
(354) FOFA (Future of Financial Advice)
(355) food
(356) foods
(357) footprint
(358) footprinting
(359) forest
(360) forestry
(361) FOS (Financial Ombudsman Service)
(362) foster
(363) fostering
(364) fosters
(365) freedom
(366) frequency
(367) freshwater
(368) FSI (Fatal and Serious Injuries)
(369) FTSE4Good
(370) FVR (Fatigue-Violation Rate)
(371) GAIA
(372) Gallup
(373) Gallup's
(374) gaps
(375) gas outages
(376) GCA (Governance, Culture, and Accountability)
(377) gCO2
(378) gCO2e
(379) GDPR (General Data Protection Regulation)
(380) GED (General Educational Development)
(381) gender
(382) Gender-Equality Index
(383) GHG
(384) GHG-related
(385) GHGE
(386) GMDSS (Global Maritime Distress and Safety System)
(387) GMP (Good Manufacturing Practice)
(388) GMP-compliant (Good Manufacturing Practice-compliant)
(389) GMP-ready (Good Manufacturing Practice-ready)
(390) GMR (Global Minimum Requirements)
(391) governance
(392) GPG (gender pay gap)
(393) green
(394) greener
(395) greenhouse
(396) greening
(397) GRESB (Global Real Estate Sustainability Benchmark)
(398) GRI (Global Reporting Initiative)
(399) GSCOP (Grocery Supply Code of Practice)
(400) GWh
(401) GxP (Good x Practice)
(402) HACT (Housing Associations' Charitable Trust)
(403) happier
(404) happiness
(405) harassment
(406) harm
(407) harmful
(408) harms
(409) hazard
(410) hazardous
(411) hazards
(412) HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems)
(413) HDSA (Historically Disadvantaged South Africans)
(414) HDSAs (Historically Disadvantaged South Africans)
(415) health
(416) Health-e Workforce Solutions
(417) healthcare
(418) healthcare-associated
(419) healthier
(420) healthy
(421) heat
(422) help
(423) helped
(424) helping
(425) HES (Health, Environment, and Safety)
(426) HESS (Health, Environment, Safety, and Security)
(427) high-hazard
(428) high-severity
(429) HIPAA (Health Insurance Portability and Accountability Act)
(430) HIRR (Hazard Identification Reporting Rate)
(431) HIV
(432) HMDA (Home Mortgage Disclosure Act)
(433) homes
(434) hospice
(435) hospital
(436) hospitality
(437) hospitalization
(438) house
(439) housing
(440) HPI (High-Potential Incident)
(441) HPIFR (High-Potential Incident Frequency Rate)
(442) HPIs (High-Potential Incidents)
(443) HPN (High-Performing Norm)
(444) HQE (Haute Qualité Environnementale)
(445) HRA (Health Risk Assessment)
(446) HRI (High-Risk Incident)
(447) HSE (Health, Safety, and Environment)
(448) HSEC (Health, Safety, Environment, and Community)
(449) HSEIP (Health, Safety, and Environment Improvement Plan)
(450) HSEMS (Health, Safety, and Environment Management System)
(451) HSEQ (Health, Safety, Environment, and Quality)
(452) HSER (Health, Safety, Environment, and Regulatory)
(453) HSES (Health, Safety, Environment, and Sustainability/Health, Safety, and Environmental Standards/Health, Safety, Environment, and Security)
(454) HSMSO (Health and Safety Management System Objective)
(455) HSS (Health, Safety, and Sustainability)
(456) HSSD (Health, Safety, and Sustainable Development)
(457) HSSE (Health, Safety, Security, and Environment)
(458) HSSEC (Health, Safety, Security, Environment, and Community)
(459) HSSEQ (Health, Safety, Security, Environment, and Quality)
(460) HTA (Health Technology Assessment)
(461) human
(462) human-resource
(463) human-resources
(464) humanitarian
(465) humanity
(466) hygiene
(467) ICAM (Incident Cause Analysis Method)
(468) IDEAL (Inclusion, Diversity, Equity, Access and Leadership)
(469) IIR (Illness Incident Rate/Injury Incident Rate)
(470) illegal
(471) illness
(472) illnesses
(473) impact
(474) impacted
(475) impacting
(476) impacts
(477) incidence
(478) incidences
(479) incident
(480) incident-based
(481) incidents
(482) inclusion
(483) inclusion-related
(484) inclusiveness
(485) inclusivity
(486) Indigenous
(487) infractions
(488) inhalable
(489) injuries
(490) injury
(491) Innu
(492) inpatient
(493) inspires
(494) integrity
(495) intensity
(496) interpersonal
(497) Inuit
(498) involvement
(499) IOSA (IATA Operational Safety Audit)
(500) ISO-compliance
(501) ISP (Incidents with Serious Potential)
(502) ISS ESG
(503) ISS ESG rating
(504) ISS-oekom
(505) JCI (Joint Commission International)
(506) job
(507) job-safety
(508) jobs
(509) JSEA (Job Safety and Environmental Analysis)
(510) justice
(511) kCO2
(512) kgCO2
(513) kgCO2e
(514) kids
(515) kWh
(516) KYC (Know Your Customer)
(517) L6
(518) labor
(519) landfill
(520) landscape
(521) Latinx
(522) laundering
(523) lawfully
(524) LDAR (Leak Detection and Repair)
(525) leader
(526) leaders
(527) leadership
(528) leakage
(529) leaks

(530) LEED (Leadership in Energy and Environmental Design)
(531) legal
(532) legislation
(533) LFTR (Lost-Time Injury Frequency Rate)
(534) LGBTQ
(535) life-changing
(536) life-enhancing
(537) LifeSkills
(538) literacy
(539) litigations
(540) livelihood
(541) lives
(542) LMICs (Low- and Middle-Income Countries)
(543) local
(544) LOCIs (Loss-of-Containment Incidents)
(545) LOPC (Loss of Primary Containment)
(546) lost
(547) Lost-Time
(548) low-carbon
(549) low-emission
(550) LTAFR (Lost-Time Accident Frequency Ratio)
(551) LTAR (Lost-Time Accident Rate)
(552) LTAs (Lost-Time Accidents)
(553) LTDIF (Lost-Time and Disabling Injury Frequency)
(554) LTFIR (Lost-Time Injury Frequency Rate)
(555) LTI (Lost-Time Incidents/Long-Term Injuries)
(556) LTIF (Lost-Time Injury Frequency)
(557) LTIFR (Lost-Time Injury Frequency Rate)
(558) LTIIR (Lost-Time Injury Incidence Rate)
(559) LTIR (Lost-Time Injury Rate)
(560) LTIS (Lost-Time Injury Severity)
(561) LTIs (Lost-Time Injuries)
(562) LTISR (Lost-Time Incident Severity Rate)
(563) LWCR (Lost Workday Case Rate)
(564) LWDIR (Lost Workday Case Incidence Rate)
(565) LWDR (Lost Workday Rate)
(566) MAIFI (Momentary Average Interruption Frequency Index)
(567) malaria
(568) males
(569) managerial
(570) managers
(571) materiality
(572) maternal
(573) Mecheshoo
(574) Medicaid
(575) medical
(576) medically
(577) medicine
(578) medicines
(579) men
(580) mental
(581) mentality
(582) mentor
(583) mentoring
(584) mentorship
(585) methane
(586) microplastics
(587) middle-income
(588) migrant
(589) minorities
(590) minority
(591) mitigate
(592) mitigating
(593) mitigation
(594) MMTCO2e
(595) mobility
(596) monitor
(597) morale
(598) morbidity
(599) mortality
(600) MOSWEC (Mass-on-Spring Wave Energy Convertor)
(601) motivated
(602) motivating
(603) MSCI
(604) MSHA (Mine Safety and Health Administration)
(605) MTIFR (Medically Treated Injuries Frequency Rate)
(606) multiculural
(607) multiracial
(608) MVI (Motor Vehicle Incident)
(609) NABERS (National Australian Built Environment Rating System)
(610) nationality
(611) native
(612) near-miss
(613) NECEC (New England Clean Energy Connect)
(614) neighborhoods
(615) net-zero
(616) ISNetworld
(617) neutralize
(618) newborn
(619) NFDL (Non-Fatal Days Lost)
(620) nitrogen
(621) noise
(622) noise-related
(623) non-compliance
(624) non-compliances
(625) non-compliant
(626) non-discrimination
(627) non-emitting
(628) non-fatal
(629) non-fresh
(630) non-hazardous
(631) non-injury
(632) non-renewable
(633) non-reportable
(634) non-white
(635) norms
(636) NPS (Net Promoter Score)
(637) NQS (National Quality Standard)
(638) nurture
(639) nurturing
(640) nutrition
(641) occupational
(642) ODMs (organizational diversity metrics)
(643) odor
(644) Ofcom
(645) offset
(646) offsets
(647) offsetting
(648) Ofwat
(649) OHC (Organizational Health Check)
(650) OHES (Occupational Health, Environmental, and Safety)
(651) OHI (Organizational Health Index)
(652) OHSAS (Occupational Health and Safety Assessment Series)
(653) OHSE (Occupational Health, Safety, and Environment)
(654) OII (Occupational Illnesses and Injuries)
(655) OIIR (Occupational Illness and Injuries Rate)
(656) oil-to-gas
(657) ombudsman
(658) ORIR (Occupational Safety and Health Administration Recordable Incident Rate)
(659) OSHA (Occupational Safety and Health Administration)
(660) OSHA-recordable (Occupational Safety and Health Administration-recordable)
(661) outpatient
(662) OWL (Online Wisdom of Linamar)
(663) P1 (Priority 1)
(664) palm
(665) parental
(666) passion
(667) patient
(668) patient-centric
(669) patient-focused
(670) patients
(671) peatland
(672) people
(673) people-based
(674) peoples
(675) personnel development
(676) PHC (Plant Health Committee)
(677) PHEV (plug-in hybrid vehicle)
(678) philanthropic
(679) philanthropy
(680) phishing
(681) photovoltaic
(682) physician
(683) planet
(684) plant-based
(685) planting
(686) plastic
(687) plastics
(688) PLMUS (Professional-Level Women, U.S.)
(689) PLWG (Professional-Level Women, Global)
(690) PM10 (Particulate Matter 10)
(691) PMVA (Preventable Motor Vehicle Accidents)
(692) PMVAR (Preventable Motor Vehicle Accident Rate)
(693) policies
(694) policy
(695) policymaker
(696) pollution
(697) pollutions
(698) population
(699) populations
(700) positivity
(701) potable
(702) poverty
(703) POW (Program of Work)
(704) prejudice
(705) preventable
(706) preventative
(707) prevention
(708) preventive
(709) privacy
(710) products
(711) prosecution
(712) prosper
(713) protect
(714) protected
(715) protecting
(716) protection
(717) PSER (Process Safety Event Rate)
(718) PSEs (Process Safety Events)
(719) PSIR (Process Safety Incident Rate)
(720) PSIs (Potentially Serious Incidents)
(721) PSPS (Public Safety Power Shutoff)

(722) psychologically
(723) PUE (Power Usage Effectiveness)
(724) PV (photovoltaics)
(725) PVAR (Preventable Vehicle Accident Rate)
(726) PVIR (Preventable Vehicle Incident Rate/Preventable Vehicle Injury Rate)
(727) QHSE (Quality, Health, Safety, and Environment)
(728) QHSES (Quality, Health, Safety, Environment, and Security)
(729) QualityScore
(730) race
(731) racial
(732) racialized
(733) RCFR (Recordable Case Frequency Rate)
(734) RCR (Recordable Personal Injury Case Rate)
(735) recordable
(736) recordables
(737) recruit
(738) recruiting
(739) recyclability
(740) recyclable
(741) recycle
(742) recycled
(743) recycling
(744) reduce
(745) reduction
(746) reductions
(747) refuel
(748) regeneratively
(749) regime
(750) regulation
(751) regulations
(752) regulator
(753) regulators
(754) regulatory
(755) rehab
(756) rehabilitate
(757) rehabilitated
(758) rehabilitation
(759) rehospitalization
(760) relations
(761) relationship
(762) reliability
(763) reliance
(764) remotely
(765) removals
(766) renewable
(767) renewables
(768) replacements
(769) represented
(770) resilience
(771) resilience-based
(772) resiliency
(773) resilient
(774) reskilling
(775) resource
(776) resources
(777) resources-related
(778) respecting
(779) respects
(780) responsibilities
(781) responsibility
(782) responsible
(783) responsibly
(784) restoration
(785) retention
(786) retirees
(787) retraining
(788) reusable
(789) reusables
(790) reuse
(791) reused
(792) RGMP (Responsible Gold Mining Principles)
(793) Ribbon
(794) RICI (Road Injury Crash Index)
(795) RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations)
(796) RIDDORs (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations)
(797) RIF (Reportable Incident Frequency/Reportable Injury Frequency)
(798) RIFR (Recordable Injury Frequency Rate/Reportable Injury Frequency Rate)
(799) rights
(800) RightShip
(801) RIR (Recordable Incident Rate/Reportable Incident Rate)
(802) Robeco
(803) RobecoSAM
(804) rPET (recycled polyethylene terephthalate)
(805) RSE (Responsabilité Sociétale des Entreprises)
(806) RVIR (Recordable Vehicular Incident Rate)
(807) SACIFR (Serious Actual Consequence Incidence Frequency Rate)
(808) SAF (Sustainable Aviation Fuel)
(809) safe
(810) safeguarding
(811) safely
(812) safer
(813) safety
(814) safety-first
(815) safety-related
(816) SAIDI (System Average Interruption Duration Index)
(817) SAIFI (System Average Interruption Frequency Index)
(818) salary
(819) saltwater
(820) SAM (Sustainable Asset Management)
(821) sanitation
(822) Sapin
(823) Sarbanes-Oxley
(824) SASB (Sustainability Accounting Standards Board)
(825) satisfaction
(826) satisfactory
(827) satisfied
(828) satisfy
(829) SBTi (Science Based Targets initiative)
(830) SBTi-approval (Science Based Targets initiative-approval)
(831) SCFR (Serious Case Frequency Rate)
(832) science-based
(833) scope
(834) scopes
(835) SDG (Sustainable Development Goal)
(836) secrecy
(837) security
(838) SEEC (Sustainable Energy and Environment Coalition)
(839) SEIFR (Significant Environmental Incident Frequency Rate)
(840) self-care
(841) self-development
(842) serious
(843) severity
(844) sexual
(845) SF6 (sulfur hexafluoride)
(846) shared-value
(847) SHECR (Safety, Health, Environment, and Community Relations)
(848) SHECS (Safety, Health, Environment, and Sustainability)
(849) SHS (Safety, Health, and Sustainability)
(850) sick
(851) sickness
(852) SICR (Serious Injury Case Rate)
(853) SIF (Serious Incidents and Fatalities/Serious Injury and Fatality/Serious Injuries and Fatalities)
(854) SIFR (Serious Injury Frequency Rate/Significant Injury Frequency Rate)
(855) sinks
(856) SIP (Sustainable Improvement Program)
(857) slates
(858) slavery
(859) SLO (Social License to Operate)
(860) smallholder
(861) SMBs (Small and Micro Businesses)
(862) SMCR (Senior Managers and Certification Regime)
(863) SO2 (sulfur dioxide)
(864) social
(865) social-economical
(866) social health
(867) socially
(868) societal
(869) societies
(870) society
(871) society's
(872) socioeconomic
(873) soil
(874) solar
(875) solidarity
(876) SOX (Sarbanes-Oxley)
(877) SOX deficiencies (Sarbanes-Oxley deficiencies)
(878) SOX-compliant (Sarbanes-Oxley-compliant)
(879) species
(880) spill
(881) spilled
(882) spills
(883) SPMVI (Serious Preventable Motor Vehicle Incident)
(884) SSOFR (Significant Safety Occurrence Frequency Rate)
(885) staff
(886) stakeholders
(887) StakeholderWatch
(888) STARR (Safety, Teamwork, Accountability, Respect and Results)
(889) statutorily
(890) stewardship
(891) stress
(892) succession
(893) suicide
(894) supervisors
(895) supplied
(896) support
(897) supported
(898) supporting
(899) supportive
(900) supports
(901) surveillance
(902) SustainAbilities
(903) sustainability
(904) sustainability-based
(905) sustainability-labelled

(906) sustainability-linked
(907) sustainability-related
(908) sustainable
(909) sustainable-development
(910) sustainably
(911) Sustainagility
(912) Sustainalytics
(913) SWD (saltwater disposal)
(914) system average
(915) tailings
(916) tails
(917) talent
(918) talents
(919) TAR (Total Accident Rate)
(920) taxonomy
(921) TCEQ (Texas Commission on Environmental Quality)
(922) TCF (Treating Customers Fairly)
(923) TCFD (Task Force on Climate-Related Financial Disclosures)
(924) TCIR (Total Case Incident Rate/ Total Case Incidence Rate)
(925) tCO2
(926) tCO2e
(927) team
(928) teambuilding
(929) teammate
(930) teams
(931) teamwork
(932) teamworking
(933) TFAF (Total First Aid Frequency)
(934) TFIR (Total Frequency Incident Rate)
(935) thriving
(936) TICR (Total Incident Case Rate)
(937) TIFR (Total Injury Frequency Rate/Total Incident Frequency Rate)
(938) TIR (Total Incident Rate)
(939) traceability
(940) traceable
(941) TRAFR (Total Reportable Accident Frequency Rate)
(942) training
(943) trainings
(944) transparency
(945) TRCF (Total Recordable Case Frequency)
(946) TRCFR (Total Recordable Case Frequency Rate)
(947) TRCR (Total Recordable Case Rate)
(948) treatable
(949) treating
(950) trees
(951) TRER (Total Recordable Environmental Rate)
(952) TRFIR (Total Recordable Injury Frequency Rate)
(953) TRI (Total Recordable Injuries)
(954) TRIF (Total Recordable Injury Frequency/Total Reportable Injury Frequency/Total Recordable Incident Frequency)
(955) TRIFR (Total Recordable Injury Frequency Rate/Total Reportable Injury Frequency Rate)
(956) TRIR (Total Reportable Incident Rate/Total Recordable Incident Rate)
(957) TRR (Total Recordable Rate)
(958) trust
(959) trustworthiness
(960) trustworthy
(961) TSM (Towards Sustainable Mining)
(962) TTIFR (Total Treatable Injury Frequency Rate)
(963) UN (United Nations)
(964) underrepresented
(965) underserved
(966) unionized
(967) unions
(968) unsafe
(969) upcycling
(970) upskilling
(971) urgency
(972) value-based
(973) values
(974) values-based
(975) vegetation
(976) veteran
(977) veterans
(978) Vigeo Eiris
(979) village
(980) violation
(981) violations
(982) VIR (Vehicle Incident Rate)
(983) VOCs (volatile organic compounds)
(984) VoE (Voice of Employee)
(985) voluntary turnover
(986) volunteered
(987) volunteering
(988) volunteerism
(989) vulnerable
(990) WACI (weighted average carbon intensity)
(991) warming
(992) warning
(993) waste
(994) wastes
(995) wastewater
(996) water
(997) water-intensive
(998) waters
(999) watershed
(1000) ways-of-working
(1001) welfare
(1002) wellbeing
(1003) wellness
(1004) whistleblowing
(1005) WHS (Work, Health, and Safety/Workplace Health and Safety)
(1006) wildfire
(1007) wildflower
(1008) wildlife
(1009) wind
(1010) WLO (World-Leading Operations)
(1011) WLTP (Worldwide Harmonised Light Vehicles Test Procedure)
(1012) woman
(1013) women
(1014) women-owned
(1015) women's sponsorship
(1016) women’s
(1017) wood
(1018) woodland
(1019) work
(1020) work-related
(1021) workable
(1022) workday
(1023) workdays
(1024) worked
(1025) worker
(1026) workers
(1027) workforce
(1028) worklife
(1029) workload
(1030) workplace
(1031) workplaces
(1032) worksite
(1033) world's
(1034) worst
(1035) young
(1036) youth
(1037) zero-carbon
(1038) zero-fatalities

Earnings Keywords

(1) accounting return
(2) adjusted OCI
(3) after tax
(4) before tax
(5) billing
(6) CAD
(7) capital effectiveness
(8) capital efficiency
(9) cash
(10) CFROI
(11) change in working capital
(12) contribution margin
(13) debt service
(14) direct contribution
(15) earned premium
(16) earnings
(17) EBIT
(18) economic return
(19) economic value
(20) EPI
(21) EPS
(22) equity value
(23) EVA
(24) FAD
(25) FCF
(26) FFO
(27) fixed charge
(28) funds available
(29) funds from operations
(30) income
(31) interest cover
(32) interest margin
(33) internal capital generation
(34) internal return
(35) invoicing
(36) IRR
(37) LCR
(38) liquidity
(39) loan to deposit
(40) margin
(41) MEP
(42) net gain
(43) net loss
(44) NIM
(45) NOI
(46) NOPAT
(47) NPAT
(48) OIBDA
(49) operating loss
(50) OPROS
(51) PACC
(52) PAT
(53) payback
(54) PBIT
(55) PBT
(56) post-tax
(57) pre tax
(58) pre-tax
(59) profit
(60) property return
(61) rate of return
(62) RCOP
(63) recycle ratio
(64) result
(65) return on
(66) return rate
(67) return ratio
(68) return on assets
(69) return on net
(70) ROA

(71) ROC
(72) ROCCE
(73) ROE
(74) ROFE
(75) ROGEV
(76) ROI
(77) RONA
(78) RORAC
(79) RORC
(80) RORWA
(81) ROS
(82) ROTCE
(83) ROTE
(84) TAR
(85) total capital generation
(86) TPR

Operating Keywords

(1) A&D activities
(2) access
(3) ACQ
(4) acquire
(5) acquisition
(6) AER
(7) AISC
(8) allocation of assets
(9) allocation of capital
(10) annual spend
(11) ARIS
(12) asset base
(13) asset growth
(14) asset quality
(15) asset turns
(16) ATWC
(17) AWC
(18) balance sheet
(19) borrowings
(20) C&E
(21) CapEx
(22) capital
(23) capital adequacy
(24) capital allocation
(25) capital and exploratory
(26) capital deployment
(27) capital expenditure
(28) capital expense
(29) capital growth
(30) capital level
(31) capital position
(32) capital program
(33) capital project
(34) capital ratio
(35) capital recycling
(36) capital spend
(37) capital structure
(38) capital turnover
(39) cash conversion cycle
(40) cash cycle
(41) CASM
(42) CET1
(43) charge-off
(44) CIR
(45) classified
(46) combined ratio
(47) combined trade ratio
(48) common equity
(49) corporate expenditure
(50) cost
(51) credit loss
(52) credit provision
(53) credit quality
(54) criticized asset
(55) criticized loans
(56) days of inventory
(57) days sales
(58) DBAR
(59) debt
(60) default
(61) delinquency
(62) development cost
(63) DIO
(64) DSO
(65) DUAR
(66) DWC
(67) efficiencies
(68) efficiency
(69) equity
(70) equity ratio
(71) equity/assets
(72) expand asset base
(73) expenditure
(74) expense
(75) F&D
(76) FD&A
(77) fee
(78) financial flexibility
(79) financial position
(80) financial resources
(81) financial stability
(82) financial strength
(83) financing
(84) finding and development
(85) finding cost
(86) finding development
(87) funding
(88) G&A
(89) gearing
(90) general and administrative
(91) GMV
(92) gross asset base
(93) grow asset base
(94) growth in assets
(95) growth in core assets
(96) growth in unencumbered asset pool
(97) growth of assets
(98) growth rate in assets
(99) GWP
(100) impairment
(101) increase asset base
(102) inorganic
(103) internal capital generation
(104) inventories
(105) inventory
(106) invested capital
(107) investment
(108) leverage
(109) liability
(110) loan loss
(111) loan quality
(112) loan to value
(113) LOE
(114) loss ratio
(115) LTV
(116) M&A
(117) management fee growth
(118) megawatts
(119) merchandise volume
(120) modernize asset base
(121) NCO
(122) new assets growth
(123) NIW
(124) non-accrual
(125) non-acquired growth
(126) non-performing
(127) NPA
(128) NPE
(129) NPL
(130) NSFR
(131) NWC
(132) O&M
(133) operating
(134) operating leverage
(135) operating ratio
(136) operational effectiveness
(137) OpEx
(138) optimize our current asset base
(139) organic growth
(140) overhead
(141) OWC
(142) policyholder's surplus
(143) premium
(144) project finance
(145) provision expense
(146) provision for
(147) provision of
(148) provision rate
(149) PWCPS
(150) R&D
(151) raise
(152) raising
(153) ratio
(154) receivable
(155) research
(156) research and development
(157) revenue
(158) risk-based
(159) risk-weighted
(160) RWA
(161) sales
(162) saving
(163) shareholder's equity
(164) solvency
(165) spend
(166) stock cover
(167) stockholder's equity
(168) surplus growth
(169) Texas ratio
(170) tier
(171) total asset
(172) total capital
(173) turnover
(174) WCRR
(175) WCT
(176) working capital
(177) written
(178) written premium

Market Keywords

(1) index outperformance
(2) market cap
(3) market performance
(4) market value
(5) market-related
(6) price to
(7) securityholder return
(8) share price
(9) share valuation
(10) shareholder return
(11) stock performance
(12) stock price
(13) stockholder return
(14) TSR

Figure IA.1. ESG metric usage by firm size

This figure displays the proportion of firms reporting various types of compensation metrics by region and market capitalization. Compensation data are obtained from Executive Compensation Analytics (ECA) provided by ISS (Institutional Shareholder Services). The international sample includes firms from 34 countries spanning the years 2011 to 2021.

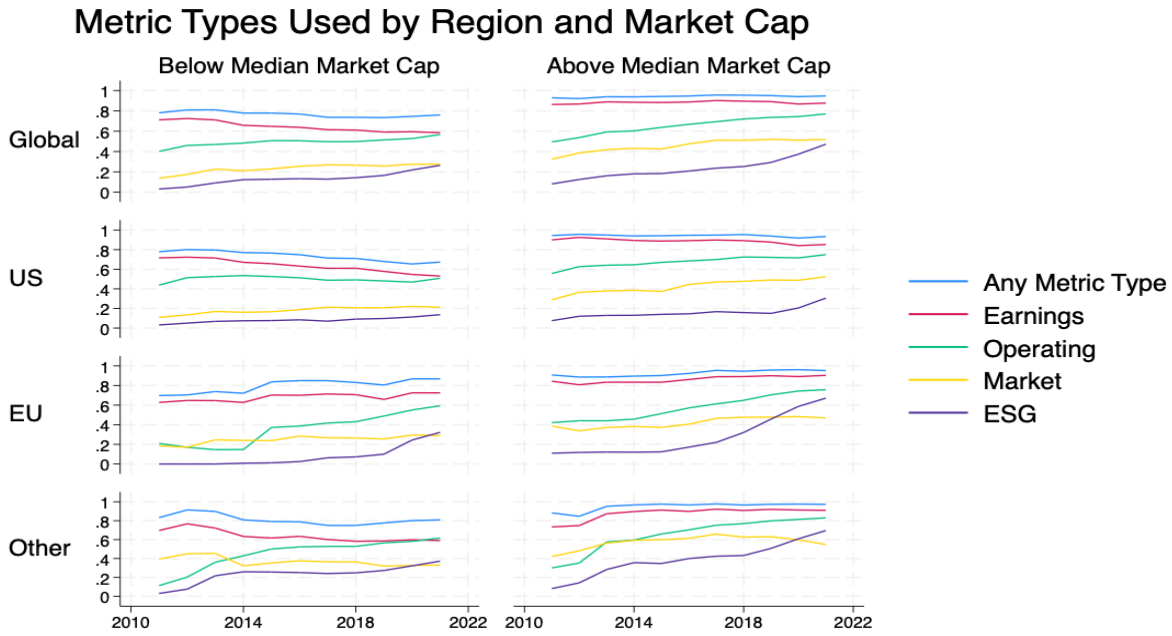
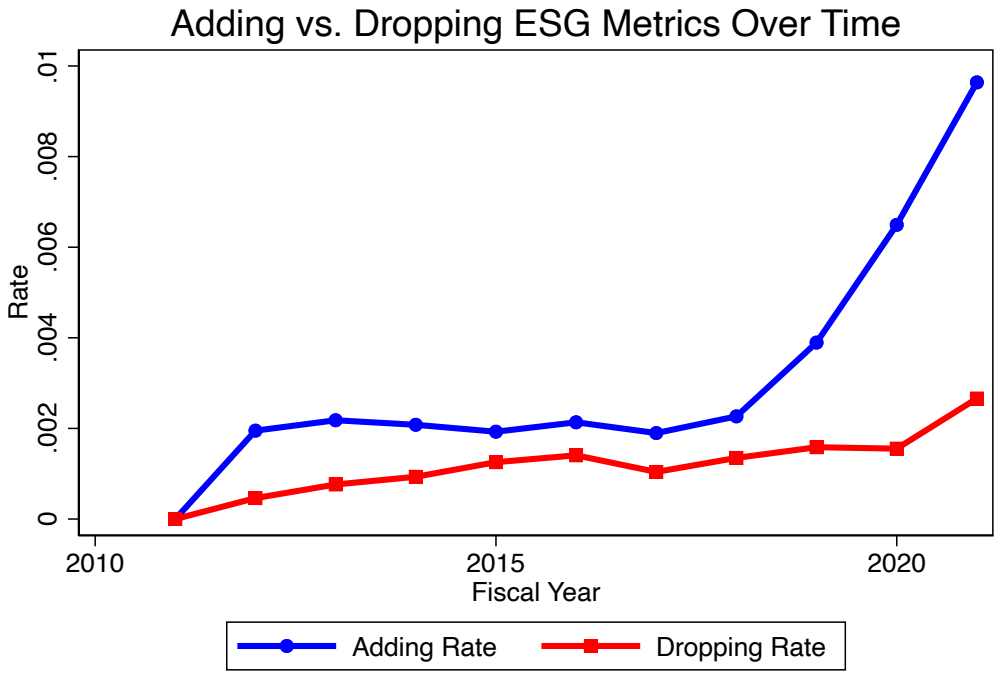


Figure IA.2. Add and drop rates of ESG metrics over time

This figure shows the time trends in ESG metric adoption and removal in executive compensation contracts between 2011 and 2021. The analysis is conducted at the firm-metric-year level, where *'add rate'* represents the fraction of firm-metric observations where an ESG metric is introduced for the first time, and *'drop rate'* represents the fraction where an ESG metric is removed. The blue line with circles shows the add rates, while the red line with squares shows the drop rates. The diverging trends demonstrate that firms are increasingly adopting ESG metrics in their compensation contracts over time, while the removal of such metrics remains uncommon.



Note: Based on firm-metric-year level data

Figure IA.3. Sales similarity between marginal peers and marginal non-peers

This figure compares the similarity in sales between marginal peers (firms just above the ISS peer selection threshold) and marginal non-peers (firms just below the threshold), measured as the average absolute relative distance in sales from the focal firm. Panel A shows the distribution of sales distances for peers and non-peers of focal firms with 14–24 total peers. Panel B shows the distribution for peers and non-peers of focal firms with exactly 24 peers. Histograms are displayed only for values less than or equal to 2 to improve readability.

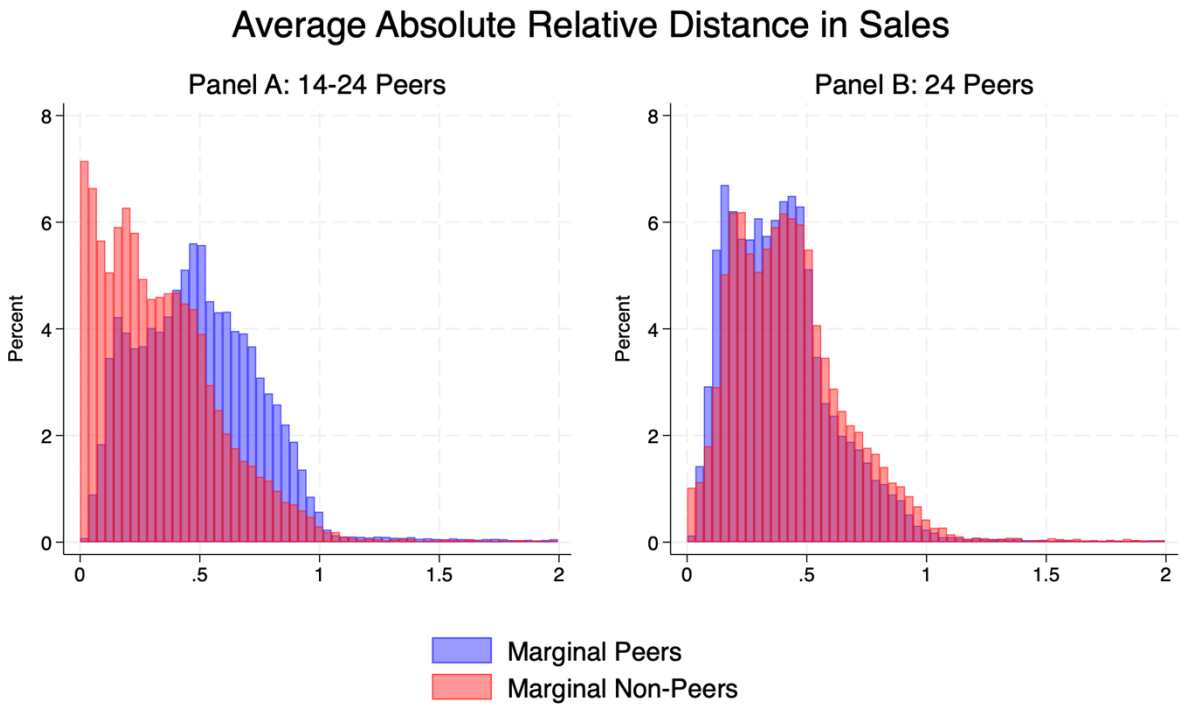


Table IA.1. Operating, earnings, and market metrics

This table presents firm-level analysis of the determinants of non-ESG compensation metrics. Panel A examines operating (columns 1-2), earnings (columns 3-4), and market (columns 5-6) metrics as a function of CEO tenure and other firm characteristics. Odd-numbered columns include year, industry, and country fixed effects, while even-numbered columns include firm and year fixed effects. Panel B examines specific operating metrics (cashflow, profitability, and sales in columns 1-3) and earnings metrics (efficiency, investment, and capital structure in columns 4-6) in relation to corresponding firm performance measures. All regressions in Panel B include year, industry, and country fixed effects. All firm-level controls (except CEO Tenure) are lagged and described in Appendix A. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

Panel A. Determinants of operating, earnings, and market metrics

	(1)	(2)	(3)	(4)	(5)	(6)
	Operating Metric		Earnings Metric		Market Metric	
CEO Tenure	-0.0027***	-0.0013*	-0.0025***	-0.0003	-0.0055***	-0.0016**
	(-3.37)	(-1.85)	(-4.18)	(-0.57)	(-7.74)	(-2.15)
Log(Var Daily Returns)	-0.0028	-0.0137***	-0.0547***	-0.0141***	-0.0002	-0.0060*
	(-0.53)	(-3.69)	(-12.34)	(-4.47)	(-0.03)	(-1.70)
St. Dev. All Pulse News	0.0018***	0.0007**	0.0018***	0.0005**	0.0006	0.0003
	(3.65)	(2.26)	(4.94)	(2.02)	(1.18)	(1.04)
St. Dev. Ind-adj. ROE	-0.0036	-0.0029	-0.0562***	-0.0083	0.0005	-0.0133
	(-0.39)	(-0.33)	(-7.43)	(-1.20)	(0.05)	(-1.39)
Log Mkt Cap	0.0383***	0.0052	0.0299***	0.0246***	0.0586***	0.0045
	(9.90)	(0.81)	(10.11)	(5.15)	(16.17)	(0.73)
Inst Block Own	0.0932***	0.0452	0.1164***	-0.0079	0.1465***	0.0589**
	(2.68)	(1.60)	(4.39)	(-0.41)	(4.49)	(2.18)
Large Non-Inst Block	-0.0886***	-0.0437***	-0.0603***	-0.0311***	-0.1089***	-0.0249*
	(-6.56)	(-3.10)	(-5.85)	(-3.06)	(-8.91)	(-1.94)
Below Avg ESG Rank	-0.0164	-0.0076	-0.0058	-0.0075*	-0.0025	0.0042
	(-1.63)	(-1.18)	(-0.85)	(-1.83)	(-0.24)	(0.61)
Observations	26,731	26,298	26,731	26,298	26,731	26,298
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	NO	YES	NO	YES	NO
Country FE	YES	NO	YES	NO	YES	NO
Firm FE	NO	YES	NO	YES	NO	YES
Adjusted R2	0.0811	0.626	0.229	0.710	0.173	0.651

Panel B. Individual operating and earnings metrics and firm performance

	(1)	(2)	(3)	(4)	(5)	(6)
	Cashflow Metric	Profitability Metric	Sales Metric	Efficiency Metric	Investment Metric	Capital Structure Metric
Ind-adj. CF/Assets	-0.0433*					
	(-1.67)					
St. Dev. Ind-adj. CF/Assets	-0.0601***					
	(-2.61)					
Ind-adj Profitability		0.2077***				
		(7.60)				
St. Dev. Ind-adj Profitability		-0.2776***				
		(-10.66)				
Ind-adj Sales/Assets			-0.0210*			
			(-1.77)			
St. Dev. Ind-adj Sales/Assets			0.0479			
			(1.36)			
Ind-adj. COGS/Sales				-0.0000		
				(-0.03)		
St. Dev. Ind-adj. COGS/Sales				0.0000		
				(0.15)		
Ind-adj. PPE/Assets					0.0905***	
					(5.47)	
St. Dev. Ind-adj. PPE/Assets					0.0898	
					(1.38)	
Ind-adj. Book Leverage						0.0007***
						(4.25)
St. Dev. Ind-adj. Book Leverage						-0.0014***
						(-3.63)
CEO Tenure	-0.0038***	-0.0026***	-0.0025***	-0.0011*	0.0010***	0.0009*
	(-6.01)	(-4.00)	(-3.22)	(-1.89)	(2.75)	(1.93)
Log(Var Daily Returns)	-0.0029	-0.0501***	-0.0235***	0.0038	0.0005	0.0099***
	(-0.58)	(-11.10)	(-4.65)	(0.95)	(0.20)	(3.16)
St. Dev. Ind-adj. ROE	0.0385***	-0.0339***	-0.0246**	0.0002	-0.0085**	0.0008
	(4.01)	(-4.55)	(-2.37)	(0.03)	(-2.45)	(0.16)
Log Mkt Cap	0.0484***	0.0212***	0.0313***	0.0082***	0.0037**	-0.0072***
	(13.99)	(6.76)	(8.43)	(2.99)	(2.32)	(-3.05)
Below Avg ESG Rank	-0.0115	-0.0005	-0.0081	-0.0046	-0.0036	-0.0022
	(-1.19)	(-0.06)	(-0.80)	(-0.59)	(-0.78)	(-0.40)
Inst Block Own	0.1273***	0.0307	0.0259	-0.0129	0.0329**	-0.0355
	(3.91)	(1.08)	(0.75)	(-0.49)	(1.97)	(-1.54)
Large Non-Inst Block	-0.0436***	-0.0508***	-0.0348***	-0.0307***	-0.0121**	-0.0318***
	(-4.08)	(-4.63)	(-2.65)	(-3.21)	(-2.06)	(-4.33)
Observations	26,721	26,314	26,731	22,275	26,173	23,590
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.112	0.263	0.179	0.0963	0.0862	0.111

Table IA.2. Excess compensation and ESG metrics

This table presents an analysis of excess CEO compensation in relation to ESG and other compensation metrics. In Panel A, we estimate excess total/variable/equity compensation as the residual of the respective compensation measure on common economic determinants of compensation – logarithm of CEO tenure, logarithm of lagged sales, lagged book-to-market ratio, contemporaneous and lagged returns, and contemporaneous and lagged ROA. In Panel B, we regress the excess total/variable/equity compensation on indicators for the use of ESG, operating, earnings, and market metrics in CEO compensation contracts. All models include industry and country-by-year fixed effects. The t-statistics, calculated with standard errors clustered at the industry level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

Panel A. Measures of excess compensation

	(1)	(2)	(3)
	Total Comp	Stock+ Options+ Bonus	Stock+ Options
CEO Tenure	0.0511***	0.0379***	0.0262***
	(3.22)	(3.56)	(3.34)
Sales (t-1)	0.3680***	0.4499***	0.4611***
	(12.51)	(10.36)	(9.02)
Book-to-Market (t-1)	-0.0014	-0.0026	-0.0019
	(-0.93)	(-1.24)	(-0.97)
1-yr Return	-0.0002	-0.0003	-0.0003
	(-0.67)	(-0.70)	(-0.74)
1-yr Return (t-1)	0.0005	0.0066*	0.0054
	(0.85)	(1.95)	(1.56)
ROA	0.0526	-0.0931	-0.1576***
	(0.54)	(-1.54)	(-3.34)
ROA (t-1)	-0.4845***	-0.6569***	-0.6228***
	(-4.30)	(-5.77)	(-5.57)
Observations	27,976	25,920	23,907
Year X Country FE	YES	YES	YES
Industry FE	YES	YES	YES
Adjusted R2	0.374	0.413	0.445

Panel B. Excess compensation and ESG metrics

	(1)	(2)	(3)
	Excess (Total Comp)	Excess (Stock + Options + Bonus)	Excess (Stock + Options)
ESG Metric	0.0451	0.0133	0.0388
	(0.71)	(0.15)	(0.44)
Operating Metric	0.1786***	0.2157***	0.2385***
	(3.44)	(3.18)	(3.88)
Earnings Metric	-0.0865	-0.3609*	-0.3397*
	(-0.49)	(-2.02)	(-1.82)
Market Metric	0.2084***	0.2807***	0.2899***
	(6.30)	(5.27)	(4.58)
All Categories Pulse News	0.0015***	0.0024***	0.0028***
	(3.06)	(4.10)	(4.63)
Material Pulse News	0.0020***	0.0022**	0.0025***
	(2.97)	(2.59)	(3.36)
3-yr Return	0.0026***	0.0038***	0.0038***
	(8.82)	(7.91)	(5.83)
Log Mkt Cap	0.0700***	0.1239***	0.1297***
	(4.09)	(7.30)	(6.32)
Observations	25,349	23,585	21,773
Year X Country FE	YES	YES	YES
Industry FE	YES	YES	YES
Adjusted R2	0.0591	0.0999	0.119

Table IA.3. Compensation metrics and pay sensitivity

This table examines whether the presence of compensation metrics alters the sensitivity of CEO pay to firm performance. Panel A introduces an interaction between ESG metrics and the firm's past returns. Panel B examines interactions between sales, profitability, and efficiency metrics and corresponding measures of firm performance. All regressions include lagged firm-level controls defined in Appendix A and year, industry, and country fixed effects. The t-statistics, calculated with standard errors clustered at the firm level, are reported in parentheses. Statistical significance at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

Panel A. ESG metrics and return sensitivity

	(1)	(2)	(3)	(4)	(5)	(6)
	Total Comp	Stock+ Options+ Bonus	Stock+ Options	Total Comp	Stock+ Options+ Bonus	Stock+ Options
ESG Metric	0.0415*	0.0436	0.0620**	0.0399*	0.0359	0.0599**
	(1.95)	(1.54)	(2.13)	(1.86)	(1.25)	(2.06)
3-yr Return	0.0006**	0.0012***	0.0011***	0.0005**	0.0010***	0.0009**
	(2.53)	(3.55)	(2.97)	(2.07)	(2.92)	(2.51)
ESG Metric X 3-yr Return	0.0002	0.0000	0.0002	0.0003	0.0001	0.0003
	(0.52)	(0.00)	(0.30)	(0.71)	(0.28)	(0.47)
Operating Metric	0.0812***	0.0911***	0.1334***	0.0836***	0.1033***	0.1345***
	(3.41)	(3.47)	(5.24)	(3.39)	(3.88)	(5.24)
Earnings Metric	0.1446***	-0.0799**	-0.0582	0.1398**	-0.0930**	-0.0630
	(2.79)	(-2.06)	(-1.43)	(2.55)	(-2.36)	(-1.52)
Market Metric	0.2430***	0.3239***	0.3391***	0.2365***	0.3141***	0.3306***
	(11.82)	(15.48)	(15.52)	(11.28)	(15.01)	(14.97)
All Categories Pulse News	0.0029***	0.0038***	0.0044***	0.0017***	0.0026***	0.0030***
	(6.01)	(7.88)	(8.49)	(3.16)	(4.16)	(4.48)
Material Pulse News				0.0016***	0.0018***	0.0020***
				(2.99)	(2.99)	(3.16)
Metric News	0.0003**	-0.0001	-0.0000	0.0002**	-0.0001	-0.0000
	(2.08)	(-0.51)	(-0.23)	(2.03)	(-0.39)	(-0.26)
CEO Tenure	0.0000	-0.0033*	-0.0044**	0.0005	-0.0025	-0.0035*
	(0.03)	(-1.66)	(-2.13)	(0.26)	(-1.25)	(-1.68)
Log Mkt Cap	0.3696***	0.4874***	0.4989***	0.3659***	0.4812***	0.4934***
	(29.59)	(65.65)	(66.69)	(27.96)	(64.45)	(64.94)
Observations	27,545	25,544	23,553	26,011	24,192	22,342
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Adjusted R2	0.463	0.537	0.584	0.458	0.536	0.583

Panel B. Operating and earnings metrics and performance sensitivity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Total Comp	Stock+ Options+ Bonus	Stock+ Options	Total Comp	Stock+ Options+ Bonus	Stock+ Options	Total Comp	Stock+ Options+ Bonus	Stock+ Options
Sales Metric	0.1024***	0.0939***	0.1212***						
	(3.70)	(4.13)	(4.99)						
Ind-adj. Sales/Assets	0.0032	-0.0383	-0.0547**						
	(0.15)	(-1.43)	(-2.02)						
Sales Metric X									
Ind-adj Sales/Assets	-0.0106	0.0048	0.0203						
	(-0.36)	(0.14)	(0.61)						
Profitability Metric				0.2258***	0.0804*	0.0913*			
				(5.55)	(1.89)	(1.93)			
Ind-adj. Profitability				-0.2221***	-0.3548***	-0.3020***			
				(-3.37)	(-5.35)	(-4.67)			
Profitability Metric X									
Ind-adj Profitability				0.1124	0.0953	0.1272			
				(1.19)	(1.06)	(1.31)			
Efficiency Metric							0.0903***	0.1210***	0.1592***
							(3.16)	(4.70)	(6.02)
Ind-adj. COGS/Sales							0.0003	0.0002	0.0000
							(1.26)	(0.83)	(0.06)
Efficiency Metric X									
Ind-adj. COGS/Sales							0.0003	-0.0002	0.0002
							(0.82)	(-0.42)	(0.40)
3-yr return	0.0011***	0.0022***	0.0022***	0.0012***	0.0024***	0.0024***	0.0012***	0.0022***	0.0024***
	(5.14)	(7.68)	(7.26)	(5.32)	(8.18)	(7.56)	(4.79)	(6.99)	(6.92)
Log Mkt Cap = L,	0.3936***	0.4976***	0.5123***	0.3889***	0.5057***	0.5191***	0.3925***	0.4909***	0.5012***
	(44.35)	(71.82)	(70.58)	(38.63)	(67.71)	(68.76)	(40.95)	(66.85)	(67.64)
Observations	32,043	29,413	25,778	31,706	29,103	25,489	27,387	25,221	21,995
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Adjusted R2	0.481	0.546	0.578	0.485	0.548	0.579	0.454	0.526	0.556

Table IA.4. Effect of ESG metrics on ESG scores

This table presents regression estimates of the effect of ESG metrics on firms' overall ESG performance measured by their *Combined ESG Score* in year t+1 obtained from LSEG (formerly Refinitiv). Columns 1 and 5 present OLS estimates with industry, year, and country fixed effects; columns 2 and 6 present OLS estimates with firm and year fixed effects; columns 3 and 7 present first-stage regressions; columns 4 and 8 present second-stage IV estimates with firm and year fixed effects, where the instrument is the number of ESG metrics used by marginal ISS peers (firms just above the ISS peer selection threshold). All regressions include distance controls that account for sales similarity between marginal peers and marginal non-peers. Columns 1-4 use firms with at least 14 peers (ISS minimum threshold), while columns 5-8 restrict the sample to firms with exactly 24 peers (ISS's target peer group size). Standard errors are clustered by firm. *** p<0.01, ** p<0.05, * p<0.1.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Num Peers 14-24				*Num Peers = 24*			
	Combined ESG Score (t+1)							
	OLS	OLS	First Stage	IV	OLS	OLS	First Stage	IV
Number of ESG Metrics	0.0139***	-0.0048***		0.1544	0.0133***	-0.0051**		0.1478
	(5.65)	(-2.71)		(1.26)	(4.60)	(-2.46)		(1.19)
Marg. Peers' ESG Metrics			0.1026***				0.1161***	
			(4.49)				(4.25)	
Marg. Non-peers' ESG Metrics	0.0012	0.0005	0.0853***	-0.0137	0.0002	0.0003	0.1075***	-0.0169
	(0.34)	(0.18)	(4.57)	(-1.26)	(0.05)	(0.09)	(4.78)	(-1.30)
Abs Sales Distance (Peers-Non-peers)	0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000
	(0.14)	(0.77)	(-1.60)	(1.33)	(-0.06)	(1.41)	(-1.21)	(1.51)
Abs Sales Distance X Marg Peers' ESG Metrics	-0.0000*	-0.0000***	0.0000***	-0.0000**	-0.0000	-0.0000*	0.0000	-0.0000
	(-1.83)	(-2.91)	(3.37)	(-2.01)	(-0.86)	(-1.77)	(0.24)	(-1.48)
Log Total Compensation	0.0128***	0.0016	-0.0100	0.0019	0.0152***	0.0022	-0.0172*	0.0029
	(4.25)	(1.24)	(-1.24)	(0.80)	(5.40)	(1.52)	(-1.80)	(1.29)
3-Year Return (t-1)	-0.0007***	-0.0000	0.0004*	-0.0002	-0.0006***	0.0000	0.0004*	-0.0001
	(-5.54)	(-1.05)	(1.72)	(-1.45)	(-4.49)	(0.10)	(1.70)	(-1.01)
ROA (t-1)	0.0065	0.0045	0.0896**	-0.0182	0.0011	0.0015	0.1255**	-0.0211
	(0.42)	(0.40)	(2.18)	(-0.80)	(0.06)	(0.10)	(2.34)	(-0.79)
Log Market Cap (t-1)	0.0556***	0.0156***	-0.0378**	0.0256***	0.0534***	0.0092***	-0.0540***	0.0215*
	(27.05)	(5.47)	(-2.56)	(2.92)	(22.91)	(2.71)	(-2.94)	(1.94)
All Categories ESG Performance (t-1)	0.0134***	0.0013	-0.0093**	0.0012	0.0110***	0.0003	-0.0101*	0.0005
	(8.29)	(1.45)	(-1.97)	(0.93)	(6.13)	(0.29)	(-1.70)	(0.34)
Below Avg ESG Rank (t-1)	-0.0166***	-0.0030	-0.0024	-0.0033	-0.0132***	0.0004	-0.0080	0.0006
	(-4.53)	(-1.41)	(-0.16)	(-0.96)	(-3.07)	(0.14)	(-0.47)	(0.15)
Inst Block Own (t-1)	-0.0361***	0.0263***	-0.0558	0.0345**	-0.0247	0.0254*	-0.0421	0.0287*
	(-2.78)	(2.66)	(-1.25)	(2.41)	(-1.61)	(1.93)	(-0.75)	(1.73)
Large Non-Inst Block (t-1)	-0.0345***	-0.0018	0.0256	-0.0022	-0.0355***	-0.0026	0.0018	-0.0041
	(-6.51)	(-0.37)	(1.00)	(-0.30)	(-5.95)	(-0.42)	(0.05)	(-0.47)
Observations	17,845	17,664	26,451	17,664	11,887	11,398	17,232	11,398
R-squared	0.459	0.861	0.642	-1.128	0.454	0.873	0.651	-1.136
Firm FE	NO	YES	YES	YES	NO	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Industry & Country FE	YES	NO	NO	NO	YES	NO	NO	NO
Adjusted R2	0.457	0.830	0.576	-1.128	0.451	0.838	0.569	-1.136
F-stat First Stage			20.20				18.03	