Beyond ESG: Executive Pay Metrics and Shareholder Support

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We document that executive compensation contracts with ESG metrics are more likely to feature other financial and non-financial metrics and a higher proportion of equity-based compensation than contracts without ESG metrics. Companies introduce ESG metrics in areas where they have experienced good performance; however, these metrics have limited impact on actual executive payouts or the sensitivity of pay to market, earnings, and ESG performance. Similar to metrics linked to operating performance, ESG metrics are most prevalent in companies with recently appointed CEOs, new active blockholders, and those that have experienced dissent in say-on-pay votes. All metrics increase shareholders' support in say-on-pay votes, reduce dissent on management proposals, and decrease the number of shareholder proposals, and ESG proposals in particular. Overall, the evidence suggests that ESG metrics, like all other metrics, aim to build shareholder consensus on executive compensation and corporate strategy.

Keywords. Executive compensation, ESG metrics, CEO incentives, shareholder voting, shareholder and management proposals

JEL Codes. J33, M12, M14, G34, G32

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Contracts linking executive compensation to shareholder wealth are seen as the most effective means of aligning managers' incentives with the actions shareholders would take if they had complete information about the firms they own (Jensen and Murphy, 1990; Hall and Liebman, 1998). Existing theories have mainly focused on the features of optimal contracts that maximize shareholder value, without considering the potential impact of shareholders' non-pecuniary preferences for environmental and social (E&S) policies on these contract features. However, it is plausible that optimal contracts may not change significantly due to shareholders' non-pecuniary preferences regarding E&S policies because firms' stock prices already reflect the preferences of marginal investors who would sell their shares if dissatisfied with corporate policies. Accordingly, in most cases, stock prices appear to effectively guide managerial E&S policies (Gantchev, Giannetti, and Li, 2022), and few impact funds tie compensation directly to E&S performance (Gezcy et al., 2021). Partially for this reason, the growing emphasis on E&S targets in executive compensation has raised concerns that this trend reflects CEO power and primarily serves executive interests in ways that are not transparent to stakeholders (Bebchuk and Tallarita, 2022).

To contribute to this debate, we read and manually classify the compensation targets in the executive contracts of 10,636 listed companies worldwide. Not only do we confirm the explosive growth of E&S targets in executive contracts since 2011, but we also show that boards routinely subordinate 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, contracts often feature market- and earnings-based metrics.

We examine the circumstances under which companies disclose executive compensation metrics and utilize non-financial targets in executive contracts. We show that companies with E&S metrics also reveal market, financial, and operational performance metrics. More importantly,

firms that disclose more metrics also grant their executives greater equity-based compensation, which is considered vital for aligning managerial incentives with shareholder interests. We do not find that ESG metrics correlate with higher excess pay, even though companies with operating and other metrics tend to compensate their CEOs more. These findings do not support the notion that ESG metrics reflect CEOs' power.

However, the extent to which companies rely on ESG and other metrics is not always consistent with contract theory. For instance, we observe that executive contracts tend to emphasize E&S metrics in areas where companies have recently performed well, suggesting that these metrics are not chosen to direct CEOs towards somewhat 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. 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.

Notably, boards increase the number of disclosed ESG and operating metrics when the probability of shareholder activism rises due to the arrival of new active investors or when there is greater uncertainty regarding the strategy and skills of newly appointed CEOs. Furthermore, while firms in the same industry may use similar metrics for fundamental reasons, boards are particularly likely to select compensation metrics that their company's peers, as identified by Institutional Shareholder Services (ISS), already have in place. This effect appears particularly strong for ESG metrics. Since ISS's recommendation on say-on-pay votes depends on how a firm's compensation practices conform to those of its peers (Jochem, 2025; Cabezon, 2025), we conjecture that compensation metrics are a tool boards use to avoid controversy over their executives' compensation packages. All metrics, and E&S metrics in particular, should help firms

gain support from proxy advisory firms and shareholders regarding the level and structure of CEO compensation, and may also help reduce shareholder interference on other matters concerning corporate strategy. To test these hypotheses, we analyze shareholder voting patterns and the incidence of shareholder proposals.

We begin by considering shareholders' votes on companies' compensation policies. Shareholders have the right to vote on the remuneration of executives in the US and most other jurisdictions in which firms in our sample are incorporated. We find that companies whose executives' contracts include more metrics receive a higher proportion of votes supporting their compensation packages, even after controlling for firms' stock market and E&S performance as well as executives' total compensation. The effect appears robust when we use the number of metrics used by ISS peers as an instrument for the focal firms' number of metrics. Since we control for the metrics used by other non-ISS industry peers, the instrument is unlikely to capture firm-specific circumstances, which may influence the choice of metrics and be correlated with shareholder dissent. Thus, together with the extensive controls we introduce, metric usage by ISS peers helps us identify the causal effects of metrics on shareholders' support in say-on-pay votes. Consistent with this interpretation, we observe an increase in the number of metrics featured in CEO contracts following periods of high shareholder dissent on say-on-pay proposals.

Importantly, the consensus-building effects associated with disclosing compensation metrics extend beyond compensation-related matters. Using the same methodology, we show that companies with contracts that specify more metrics are less likely to face shareholder dissent on management proposals. Thus, it appears that when boards communicate with shareholders using compensation metrics, shareholders' opposition to compensation and other proposals is significantly lower.

Further evidence supports the conjecture that compensation metrics enhance shareholders' understanding of corporate strategy, rather than merely justifying executive pay levels. Firms using E&S and other metrics are less likely to receive E&S proposals from shareholders, regardless of their actual E&S performance. Moreover, companies with a greater variety of metrics are less likely to receive shareholder proposals in general.

The number of shareholder proposals serves as a measure of the extent of shareholder dissent (Aggarwal et al., 2025). Thus, our results suggest that compensation metrics enhance shareholders' understanding of management strategy and foster consensus, despite these metrics having limited direct effects on actual executive pay. While this may merely indicate a desire to avoid shareholder activism and maintain a quiet life, to the extent that poorly conceived shareholder proposals waste managerial time and destroy shareholder value (Gantchev and Giannetti, 2021; Matsusaka, Ozbas, and Yi, 2019), compensation metrics can serve a beneficial function.

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 (Homroy, Mavruk, Nguyen, 2023; Cohen, Kadach, Ormazabal, and Reichelstein, 2023; Ikram, Li, and Minor, 2023; Hazarica et al, 2022; Flammer, Hong, and Minor, 2019; Maas, 2018; Michaely, Schmid, and Wang, 2024). Qin and Yang (2022) show that turnover is less sensitive to financial performance in companies with ESG pay. To the best of our knowledge, we are the first to consider all metrics used in executive compensation and examine the role of compensation metrics in conveying a firm's corporate strategy to its shareholders.

By highlighting that E&S metrics are merely a subset of the multitude of metrics disclosed to shareholders, we also contribute to the broader literature on executive compensation, which has largely neglected the use of diverse metrics and focused on CEOs' end-of-year equity, stock options, and bonus awards in 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 (2006) study the use of prespecified metrics in performance-based awards. These papers find that firms choose metrics that are more informative about performance, as predicted by contract theories. Moreover, these studies 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 (Jochem et al, 2025; Cabezon, 2025). Our findings show that, as a result, the detail in information disclosure may have increased, and that companies tend to disclose similar metrics to their peers.

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 includes information on salaries, bonuses, equity awards, stock options, and other forms of remuneration. We consider only CEO compensation contracts, as the data contains contracts for multiple top executives in very few instances. Our sample includes 10,636 unique firms across 34

countries from 2011 to 2021, with increasing coverage 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 Appendix C to classify these metrics. We manually review metrics with complex or ambiguous keyword combinations to improve accuracy. By combining textual analysis and manual review, we achieve an exceptionally detailed classification that enables a more nuanced analysis of compensation contracts than previous studies, which typically rely on coarse ESG metric groupings. We categorize the various metric types disclosed in compensation contracts into 31 distinct categories, each reflecting a unique aspect of executive performance evaluation.

Specifically, 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

[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.

"other" encompasses metrics like customer satisfaction and the successful completion of specific strategic projects.

We use the Sustainability Accounting Standards Board (SASB) classification to categorize the ESG metrics.[2] 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. When an ESG metric lacks sufficient specificity for precise classification, we assign it 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. For example, 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. Additionally, metrics with a clear sustainability focus that do not directly align with SASB categories, such as those related to sustainability reporting or general ESG ratings, are also grouped within this general ESG category. Furthermore, due to the overlap between specific SASB categories and the broad nature of some disclosed metrics, we have merged a few categories: Customer Privacy with Data Security, and Product Quality and Safety with Customer Welfare. Consequently, our classification comprises 24 specific ESG metrics.

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

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 use the SASB Materiality Map to evaluate the relevance of the 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-related information. 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.

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 the ranking of the company relative to its 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 and its ESG materiality score, which rank the company relative to its industry peers across all ESG dimensions and those that are material within the company's industry, respectively. 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.[3]

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.

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 and arrival of different types of blockholders.

Finally, 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

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

which the firms' emphasis on ESG performance in compensation contracts can be viewed as a substitute for shareholders' initiatives on corporate sustainability.

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 much 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. This demonstrates that similar patterns exist internationally, despite the lower prevalence of ESG metrics in the US.[4]

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. 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

[4] ESG metrics are rarely dropped during our sample period.

ESG metrics has been driven by the SASB category Employee Health and Safety, and especially 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[5] (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 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 is important to understand whether environmental and social objectives crowd out financial performance. We thus consider whether ESG metrics are a substitute for metrics related to financial performance. Panel A of Table 2 indicates that companies utilizing ESG metrics also tend to employ operating, earnings, and market metrics, suggesting that

[5] For instance, Italy and France adopted a gender quota in 2011 and Germany in 2015.

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.

We also consider whether contracts with metrics exhibit features that are typically associated with the maximization of shareholder value, 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.

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 how firm characteristics are related to the usage of ESG metrics, considering all ESG metrics (columns 1 to 4) and material ESG metrics (columns 5 and 6). While institutional ownership does not seem to matter per se, firms with new active blockholders – a category that includes hedge funds, private equity, and venture capital investors – use more ESG metrics. In contrast, companies with non-institutional blockholders are less inclined to use ESG metrics. The effects of ownership are not only statistically significant but also economically significant. An active blockholder's entry is associated with a 9% higher likelihood that the compensation contract includes ESG metrics, compared to the unconditional probability of 22%. In contrast, the presence of a non-institutional blockholder is associated with about 21% lower likelihood of using ESG metrics. These findings suggest that ESG metrics are more likely to be used in companies with more active external monitors.

Additionally, consistent with theory (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. This suggests that when traditional financial indicators are less reliable, boards focus more on non-financial performance through ESG metrics. However, the volatility of profits does not seem to matter, and, if anything, companies with volatile profits use fewer ESG metrics. Furthermore, higher volatility in ESG news tone coverage is positively associated with the adoption of ESG metrics, potentially because companies can mitigate this volatility 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 CEO tenure. Pan, Wang, and Weisbach (2015) highlight that information asymmetry regarding CEOs' strategies and abilities is highest immediately after their appointment.

Firms with longer-tenured CEOs may thus not need to use and disclose as many metrics, since the board and the market have already become 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 and may not need to convey their strategy to shareholders through 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. Finally, we observe that larger companies utilize 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 5 and 6 indicate that the factors influencing the use of material ESG metrics are similar to those for general ESG metrics.

We also explore how specific ESG metrics are chosen. We construct a metric-level dataset and investigate how firms select which specific ESG metrics to include and when to do so. Since we have many observations for a firm per year, we include firm fixed effects, thereby holding constant a firm's propensity to use any type of metric. For this reason, slow-moving firm-level characteristics, such as ownership, tend to lose significance.

Panel A of Table 4 relates the introduction of specific ESG metrics to the sentiment of ESG news coverage of a firm during the previous year. Interestingly, ESG metrics are more likely to be introduced when the overall sentiment of a firm's ESG performance coverage is negative; however, firms tend to tie executive compensation to specific ESG metrics on which they received more positive news coverage during the previous year. A one-standard-deviation increase of 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.

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 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. 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 regarding a firm's ESG performance influences the inclusion of individual ESG metrics in compensation contracts. In addition, *Bad All Categories Pulse News* is not statistically significant, confirming that firms do not introduce ESG metrics in response to ESG accidents.

Column 4 performs the same tests for material ESG metrics. The results are very similar to those obtained for other metrics, but the effect of a firm's overall ESG performance is not

statistically significant, suggesting that firms do not select material ESG metrics more frequently following poor ESG performance.

3.3 Operating, Earnings, and Market Metrics

Table 5 examines the selection process for non-ESG metrics. Specifically, we investigate the relationship between ownership structure and the use of operating, earnings, and market metrics. Similar to the case of ESG metrics, we find that firms with non-institutional blockholders are less likely to utilize any type of metric, while companies with institutional blockholders are more likely to employ all types of metrics. To the extent that non-institutional blockholders are more closely connected to management, this pattern suggests less need for these companies to explain CEO payouts and corporate strategy.

Moreover, in column 1, the arrival of a new active blockholder, who may want to influence the corporate strategy, is also correlated with a greater use of operating metrics. Specifically, the entry of a new 1% active blockholder increases the likelihood of incorporating an operating metric into the CEO's award structure by 2.23 percentage points, representing a 3.56% increase relative to the unconditional probability of 0.63. The effect, however, is non-statistically significant in column 2 when we consider the entry of a 5% active blockholder. Interestingly, new active blockholders are less likely to use earnings and market metrics.

All metrics are less likely to be used when CEOs have longer tenure and there is consequently less uncertainty about their skills and strategies.

Table 5 also shows that companies with volatile sentiment about ESG news are more likely to use operating and earnings metrics, similar to what we found for ESG metrics in Table 3. While the positive relationship between the volatility of ESG sentiment and the use of operating metrics

is highly statistically significant, the economic magnitude is significantly smaller than that for ESG metrics. A one-standard-deviation increase in the volatility of ESG news is associated with a 1.40 percentage point increase in the likelihood that the CEO's compensation contract includes an operating metric.

Consistent with contract theory, companies with lower profit volatility are more likely to use earnings metrics. However, return volatility also reduces the use of earnings metrics. Notably, the use of market metrics is not associated with any of the proxies for ESG news sentiment, return, and profit volatility.

Table IA.1 examines individual operating and earnings metrics to assess the conditions under which companies utilize these metric types. The results show that companies that lag behind their industry peers in terms of cashflows or sales tend to use more cashflow- or sales-based metrics, respectively. A one-standard-deviation decrease in the industry-adjusted cashflow-to-assets (sales-to-assets) ratio is associated with a 2.27 (1.25) percentage point increase in the likelihood of employing cashflow (sales) metrics. This corresponds to a 10.0% (3.80%) increase relative to the unconditional probability of 0.227 (0.329) in the sample.

While the above findings are potentially consistent with multitasking models, companies with high industry-adjusted profitability use more profitability-based measures, suggesting that metrics do not necessarily serve the objective of directing managerial efforts towards tasks with poor past performance.

Also, it does not appear that boards necessarily select metrics with relatively 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.

In Panel B, we see that companies with investment-based metrics tend to have higher industry-adjusted investment in property, plant, and equipment as a percentage of total assets, suggesting that boards are directing managers toward a more active investment strategy. Similarly, firms with higher industry-adjusted book leverage tend to include capital structure metrics in the CEO contract, but less so when the volatility of book leverage is higher.

4. Consequences of Compensation Metrics on Actual Pay

We explore to what extent companies with ESG metrics compensate their executives for good ESG performance more than other companies. We measure ESG performance using the sentiment of TruValue news over the previous year. In particular, we examine the extent to which the compensation of executives at firms with particularly strong recent performance increases, and how the inclusion of ESG metrics affects the 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 6, Panel A, it appears that total compensation and its components, including variable compensation such as bonuses and payouts of stock and options, increase with ESG performance. Specifically, a one-standard-deviation improvement in ESG performance is associated with a 5.78% increase in the CEO's total compensation, as indicated by the specification

in column 1.[6] Similarly, column 3 suggests that the same improvement is associated with a 9.41% increase in option awards and restricted stock grants. Metric-specific news, that is, 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 1.07% in total compensation. This suggests that CEOs are compensated for good general ESG performance regardless of whether their contracts include ESG metrics or the targets they achieve.

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 payouts to executives, 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 3.51% increase in the CEO's total compensation. The corresponding increases for general ESG news and metric-specific ESG news are 3.43% and 1.07%, respectively.

Panel B presents similar specifications as those reported in Panel A, controlling for the four metric type dummies. Interestingly, while companies that use operating and market metrics tend to compensate their executives more, the ESG metric dummy does not appear to affect compensation. This conclusion remains unchanged in Table IA.2, where we consider as dependent variable a CEO's excess compensation, estimated as in Core, Guay, and Larcker (2008). 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 are used for CEO rent extraction.

Panel C introduces an interaction between ESG metrics and the firm's past returns to study whether the inclusion of ESG-related metrics reduces the sensitivity of compensation to financial

[6] More precisely, the economic magnitude can be calculated as exp(coef*sd)-1 = exp(0.0030×18.74)-1 = exp(0.05622-1=5.78%.

performance. The interaction with past returns is never statistically significant and has a magnitude close to zero, indicating that ESG metrics do not significantly affect the level and structure of compensation. Similarly, in 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 firm performance.

Overall, these results suggest that ESG performance has a positive impact on compensation across all companies, but the presence of ESG and other metrics has limited effects on the sensitivity of total and variable compensation to ESG and financial performance. In addition, while a higher number of metric types is associated with higher compensation, this association does not hold for ESG metrics, suggesting that the use of ESG metrics is unlikely to be linked to rent extraction. The correlation between more metric types and higher pay suggests that firms may need 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. Compensation Metrics and Shareholder Consensus

5.1 Proxy Advisors' Practices and ESG Metrics

Since compensation metrics are not significantly associated with changes in the way CEOs are compensated, we ask to what extent they may be driven by higher levels of compensation disclosure and scrutiny by institutional investors during our sample period. These institutional developments drove increased standardization in the level and structure of executive compensation

(Jochem et al, 2025; Cabezon, 2025) and can potentially also explain the reliance on compensation metrics.

To evaluate whether this is the case, we exploit that many countries around the world have introduced shareholder votes on executive compensation, spurred by criticism of the increasing level 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. ISS advice has been shown to impact voting outcomes (Malenko and Shen 2016), and consequently, boards 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). Specifically, ISS considers companies in the same GICS industry that are similar in terms of sales and capitalization to the focal firm. This peer selection process is aimed at benchmarking executive compensation structures, but it also highlights a channel through which compensation practices can spread among firms.

We follow Jochem et al. (2025) to identify ISS peers and show that these peers have a disproportionate impact on a firm's decision to include specific metrics compared to other industry peers. Figure 5 presents the coefficients from regressions of first-time metric adoption on the adoption rates of ISS peers. Panel A reveals that peer influence appears particularly strong for environmental metrics, followed by social metrics. Panel B shows that ESG metrics in general

exhibit substantially stronger peer effects than operating, earnings, or market metrics. These patterns suggest that metrics adoption may be driven by external pressure.

However, we need to recognize that firms in the same industry can choose similar metrics because they face similar challenges and opportunities, preventing the identification of peer effects, the so-called reflection problem (Manski, 1993). To mitigate the challenge arising from the reflection problem, we consider that, based on their fundamentals, firms should select the same metrics as all their industry peers. Evidence that firms select metrics used by their ISS peers to an even greater extent could suggest that firms attempt to increase support for their compensation packages beyond what operational necessities could dictate.

To evaluate this, we consider the role of ISS-chosen peers versus broader industry peers in the selection of compensation metrics, and in particular ESG metrics, which, according to SASB, should be related to a firm's industry. Table 7 presents a firm-year-metric analysis comparing the influence of ISS-designated peers versus other firms in the same 6-digit Global Industry Classification Standard (GICS) industry, showing that both ISS peers and other industry peers influence ESG metric adoption. For environmental metrics, a one percentage point increase in ISS peer adoption increases the probability of first-time adoption by 0.29 percentage points, while the same increase among other industry peers yields a larger effect of 0.59 percentage points.

Since we control for the pay practices of industry peers and other firm characteristics, the effect of ISS peers can arguably reflect the tendency to promote one-size-fits-all approaches fostered by institutional investors' reliance on ISS recommendations, rather than firm-level factors that influence the choice of specific metrics. In what follows, we leverage this insight to examine how compensation metrics can foster shareholder consensus regarding the firm's strategy.

5.2 Say-on-Pay and Shareholder Dissent

The say-on-pay vote is considered a vote on executive pay and its relationship to firm performance and can be viewed as a measure of shareholders' support for a company's strategy (Cuñat, Giné, and Guadalupe, 2016). While say-on-pay votes were introduced to align the compensation policies of public firms with the interests of shareholders, critics argue that these votes interfere with corporate strategy and board governance in a way that can potentially impose high costs on corporations. We conjecture that compensation metrics may help explain 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.

To evaluate this conjecture, columns 1 and 2 of Table 8, Panel A, consider the average support for management-sponsored say-on-pay proposals voted at a company's annual meeting. 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.[7]

Following previous literature, we include controls for the level of total compensation and the company's previous returns, as shareholders are known to disagree with particularly generous compensation packages and oppose management when firms perform poorly (Ertimur, Ferri, and Muslu, 2011; Ertimur, Ferri, and Oesch, 2013). We also control for the companies' market capitalization, as compensation is expected to be higher in larger, more complex companies (e.g., Edmans, Gabaix, and Jenter, 2017). Our variables of interest are proxies for the details of compensation targets specified in the executive contract. Specifically, we include the number of broad metric types and the overall number of individual metrics.

[7] The results we present hereafter are quantitatively and qualitatively similar, irrespective of the frequency of the say-on-pay vote.

Both the number of broad metric categories and the number of specific metrics included in the contract increase shareholder support for management-sponsored say-on-pay proposals. As shown in column 1 of Panel A in Table 8, adding an additional broad metric type to a compensation contract is associated with a 0.44 percentage point increase in the mean say-on-pay approval rate. Similarly, column 2 indicates that including an additional specific metric type is linked to a 0.18 percentage point increase in the approval rate. Given that the average approval rate is 90.84%, these effects represent economically meaningful changes in shareholder support, particularly considering that say-on-pay dissent is typically concentrated among a relatively small fraction of shareholders.

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. We perform two tests to address this concern.

First, to address potential endogeneity concerns about metric selection, in columns 3 to 6, we implement an instrumental variable approach and decompose the effect of ISS peers and other industry peers. Specifically, we instrument the number of metrics (the number of metric types) using the average of the corresponding variable for the firm's ISS peers. We also control for the number of metrics (the number of metric types) used by non-ISS industry peers. The first-stage results show that metric usage by both ISS peers and other industry peers helps explain the extent to which a firm uses compensation metrics.[8] In columns 4 and 6, we use ISS peers' metric usage to instrument for the focal firm's metric usage, while controlling for non-ISS peers' usage. Interestingly, the latter does not appear to have an effect on shareholder support for the compensation package. In contrast, the coefficients on the instrumented number of metric types

[8] The first-stage F-statistics of 214.7 and 221.1 indicate that our instruments are sufficiently strong.

(column 4) and number of individual metrics (column 6) are positive and statistically significant. The ISS-driven metric effects are also economically larger than those from the ordinary least squares regressions.

The IV estimates suggest that an additional metric type increases say-on-pay approval by 2.08 percentage points, while an additional individual metric increases approval by 0.72 percentage points.

Second, to further validate our interpretation of the empirical evidence in Panel A, Panel B examines whether firms increase the number and type of metrics they report after experiencing dissent on say-on-pay votes. Evidence that this is the case would address potential endogeneity concerns and support our causal interpretation of the empirical evidence. 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 disapproval of 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 disapproval rates over a longer period – three years in even-numbered columns versus one year in odd-numbered columns. This result confirms that firms introduce compensation metrics to communicate their corporate strategy to shareholders and build shareholder consensus, thereby addressing concerns that omitted factors drive the associations in Panel A.

Panel C tests whether different types of metrics have varied effects on shareholder support for the CEO's compensation package. Based on our conjecture that compensation metrics primarily serve the objective of explaining corporate strategy, we would not expect ESG, operating, market, and earnings metrics to have different effects. To test this, we add the number

of each metric type to the earlier specifications. Consistent with our hypothesis, we find that the total number of metrics increases shareholder support for say-on-pay proposals, while individual metric categories do not exhibit statistically significant effects when considered separately. This finding confirms that different metric types perform similar communication functions.

5.3 ESG and Other Shareholder Proposals

We explore whether compensation metrics create consensus beyond say-on-pay votes by examining the probability that firms receive shareholder proposals. Shareholder proposals are a form of low-cost shareholder activism that address 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. Since most companies do not receive any proposals during a year, the number of shareholder proposals that a company receives is often considered a measure of shareholder dissent (Aggarwal et al., 2025). However, shareholder proposals generally create little value because of their inconsistent quality and individual shareholders' limited understanding of corporate strategy (Denes, Karpoff, and McWilliams, 2017; Gantchev and Giannetti, 2021). Enhanced disclosure of a firm's strategy increases the amount of information available to shareholders and may reduce the number of unwanted and misinformed shareholder proposals. Thus, if compensation metrics effectively communicate a company's corporate strategy, we should observe fewer shareholder proposals in firms with more detailed compensation metrics.

We first consider ESG proposals, which rarely pass and can therefore be considered a nuisance for firm management, which must address the proposals' relevance in shareholder meetings (He, Kahraman, and Lowry, 2023; Michaely, Ordonez-Calafi, and Rubio, 2024). Yet,

shareholders may submit ESG proposals to draw attention to firms' ESG policies, which may be unnecessary when ESG metrics are already in place. Panel A of Table 9 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. Specifically, 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 12.83% 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, by enhancing the understanding of the corporate strategy, pay metrics reduce shareholder interference. 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 at 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. For instance, a one-standard-deviation improvement in ESG performance is associated with a 4.67% decrease in the probability of receiving an ESG proposal (column 2), corresponding to 36.40% of the unconditional probability in the sample.

In Panel B of Table 9, we use 2SLS to evaluate the effect of ESG metrics that are likely to be driven by the ISS voting recommendation. We instrument a firm's use of ESG metrics with the number of metric types or number of individual metrics of its ISS peers. As in Table 8, we control

for the extent to which non-ISS industry peers use various compensation metrics. We continue to find that the use of ESG metrics decreases the probability that a firm receives an ESG proposal. The IV estimates suggest even larger effects, with the instrumented ESG metric reducing the probability of ESG proposals by approximately 48.7 percentage points (column 3) and 31.1 percentage points (column 6).

Panel C considers the number of all shareholder-sponsored proposals. We find that both the number of metric types and the number of specific metrics are negatively associated with shareholders' propensity to submit proposals. Adding an additional broad metric type to the CEO's compensation contract is associated with a decrease of approximately 0.027 in the total number of shareholder proposals, as shown in column 1. This economic magnitude represents a 15.60% decrease relative to the mean number of shareholder proposals received (17.5% in the sample). In this case, positive sentiment about the firm's ESG performance is also associated with a decrease in the probability of shareholder-sponsored proposals, but the economic magnitude is relatively modest – 1.37% (column 1).

Naturally, the effects of adding a new individual metric type are smaller, but still economically meaningful, with a decrease of 0.013 in the total number of proposals (column 2). This corresponds to a 7.66% reduction relative to the average number of shareholder proposals received. Results continue to be consistent when we use ISS peers' metrics as instrumental variables to estimate the probability that a firm receives a shareholder proposal (columns 3-6).

5.4 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 10, we consider the average vote 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 but also economically significant. The OLS results in columns 1 and 2 show that adding an additional broad metric type is associated with a 0.28 percentage point reduction in average opposition (column 1), while including an additional specific metric type is associated with a decrease of 0.11 percentage points (column 2). Given the mean opposition rate of 5.7% in our sample, these results represent economically meaningful reductions of 4.9% and 1.9%, respectively.

To address potential endogeneity in metric selection, columns 3-6 present instrumental variable estimates using ISS peer metric usage as instruments, following our earlier approach. The first-stage results demonstrate strong instruments. As shown in columns 3 and 5, the IV estimates reveal larger economic effects – adding an additional broad metric type reduces the average vote against management by 0.96 percentage points, equivalent to 16.8% lower shareholder dissent relative to the mean dissent of 5.7%. Similarly, the instrumented effect of including an additional specific metric type is associated with a decrease of 0.42 percentage points (column 5), representing a 7.4% reduction in opposition rates.

Overall, the evidence supports our conjecture that metrics are used to communicate corporate strategy and justify CEO compensation, with the objective of building consensus among investors. The fact that compensation metrics reduce opposition to all types of management proposals, not just compensation-related ones, suggests that the consensus-building effect extends well beyond executive compensation to encompass broader corporate governance and strategic decisions.

6. Conclusions

The existing literature primarily focuses on how bonuses, stock, and option awards affect the sensitivity of a CEO's pay to a firm's market performance and earnings, with the objective of aligning managerial incentives with shareholder interests. In contrast, we focus on the wide range of metrics included in executive contracts and argue that the recent proliferation of ESG metrics must be understood in the context of the usage of other metrics.

While contractual metrics have limited effects on the sensitivity of CEO pay to specific performance outcomes, they play a crucial role in reducing shareholder dissent on compensation and other management proposals. By building consensus and increasing shareholder awareness of corporate strategy, they also decrease the probability of shareholder proposals opposed by management, suggesting that compensation metrics are mainly used to create consensus on CEO pay and align shareholders' expectations with corporate strategy.

References

Aggarwal, R., Briscoe-Tran, H., Erel, I. and Starks, L.T., 2025. Public sentiment decomposition and shareholder actions. *Available at SSRN 5040715*.

Bebchuk, L.A. and Tallarita, R., 2022. The perils and questionable promise of ESG-based compensation. *J. Corp. L.*, *48*, p.37.

Bettis, J.C., Bizjak, J., Coles, J.L. and Kalpathy, S., 2018. Performance-vesting provisions in executive compensation. *Journal of Accounting and Economics*, *66*(1), pp.194-221.

Brav, A., Jiang, W. and Li, R., 2022. Governance by persuasion: Hedge fund activism and market-based shareholder influence. *Oxford Research Encyclopedia of Economics and Finance 2022. Oxford University Press*.

Cabezon, F., 2025. Executive compensation: The trend toward one-size-fits-all. *Journal of Accounting and Economics*, *79*(1), p.101708.

Cohen, S., Kadach, I., Ormazabal, G. and Reichelstein, S., 2023. Executive compensation tied to ESG performance: International evidence. *Journal of Accounting Research*, *61*(3), pp.805-853.

Coles, J.L., Daniel, N.D. and Naveen, L., 2006. Managerial incentives and risk-taking. *Journal of Financial Economics*, *79*(2), pp.431-468.

Core, J.E., Guay, W. and Larcker, D.F., 2008. The power of the pen and executive compensation. *Journal of Financial Economics*, *88*(1), pp.1-25.

Cuñat, V., Giné, M. and Guadalupe, M., 2016. Say pays! Shareholder voice and firm performance. *Review of Finance*, 20(5), pp.1799-1834.

De Angelis, D. and Grinstein, Y., 2015. Performance terms in CEO compensation contracts. Review of Finance, 19(2), pp.619-651.

Denes, M.R., Karpoff, J.M. and McWilliams, V.B., 2017. Thirty years of shareholder activism: A survey of empirical research. *Journal of Corporate Finance*, *44*, pp.405-424.

Edmans, A., Gabaix, X. and Jenter, D., 2017. Executive compensation: A survey of theory and evidence. *The Handbook of the Economics of Corporate Governance*, *1*, pp.383-539.

Edmans, A., Gosling, T. and Jenter, D., 2023. CEO compensation: Evidence from the field. *Journal of Financial Economics*, *150*(3), p.103718.

Ertimur, Y., Ferri, F. and Muslu, V., 2011. Shareholder activism and CEO pay. The Review of Financial Studies, 24(2), pp.535-592.

Ertimur, Y., Ferri, F. and Oesch, D., 2013. Shareholder votes and proxy advisors: Evidence from say on pay. *Journal of Accounting Research*, *51*(5), pp.951-996.

Ferrari, G., Ferraro, V., Profeta, P. and Pronzato, C., 2022. Do board gender quotas matter? Selection, performance, and stock market effects. *Management Science*, *68*(8), pp.5618-5643.

Ferreira, D., Ginglinger, E., Laguna, M.A. and Skalli, Y., 2020. Closing the gap: Gender quotas and corporate board composition. *Available at SSRN 2992213*.

Flammer, C., Hong, B. and Minor, D., 2019. Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: Effectiveness and implications for firm outcomes. *Strategic Management Journal*, *40*(7), pp.1097-1122.

Gantchev, N. and Giannetti, M., 2021. The costs and benefits of shareholder democracy: Gadflies and low-cost activism. *The Review of Financial Studies*, 34(12), pp.5629-5675.

Gantchev, N., Giannetti, M. and Li, R., 2022. Does money talk? Divestitures and corporate environmental and social policies. *Review of Finance*, 26(6), pp.1469-1508.

Geczy, C., Jeffers, J.S., Musto, D.K. and Tucker, A.M., 2021. Contracts with (social) benefits: The implementation of impact investing. *Journal of Financial Economics*, *142*(2), pp.697-718.

Giannetti, M. and Wang, T.Y., 2023. Public attention to gender equality and board gender diversity. *Journal of Financial and Quantitative Analysis*, *58*(2), pp.485-511.

Gormley, T.A., Gupta, V.K., Matsa, D.A., Mortal, S.C. and Yang, L., 2023. The big three and board gender diversity: The effectiveness of shareholder voice. *Journal of Financial Economics*, 149(2), pp.323-348.

Hall, B.J. and Liebman, J.B., 1998. Are CEOs really paid like bureaucrats?. *The Quarterly Journal of Economics*, *113*(3), pp.653-691.

Hazarika, S., Kashikar, A., Peng, L., Röell, A. and Shen, Y., 2022. ESG-Linked Pay Around the World—Trends, Determinants, and Outcomes. Working paper, Imperial College.

He, Y.E., Kahraman, B. and Lowry, M., 2023. ES risks and shareholder voice. *The Review of Financial Studies*, *36*(12), pp.4824-4863.

Holmström, B., 1979. Moral hazard and observability. *The Bell journal of economics*, pp.74-91.

Holmström, B. and Milgrom, P., 1991. Multitask principal–agent analyses: Incentive contracts, asset ownership, and job design. *The Journal of Law, Economics, and Organization*, 7, pp.24-52.

Homroy, S., Mavruk, T. and Nguyen, V.D., 2023. ESG-linked compensation, CEO skills, and shareholder welfare. *The Review of Corporate Finance Studies*, *12*(4), pp.939-985.

Ikram, A., Li, Z.F. and Minor, D., 2023. CSR-contingent executive compensation contracts. *Journal of Banking & Finance*, *151*, p.105655.

ISS, 2012. Evaluating for Performance Alignment: ISS's Quantitative and Qualitative Approach. Technical note. Available at: https://www.issgovernance.com/file/files/EvaluatingPayForPerformance final updated 02172012.pdf.

Ittner, C.D., Larcker, D.F. and Rajan, M.V., 1997. The choice of performance measures in annual bonus contracts. *Accounting Review*, pp.231-255.

Jensen, M.C. and Murphy, K.J., 1990. Performance pay and top-management incentives. *Journal of Political Economy*, 98(2), pp.225-264.

Jochem, T., Ormazabal, G. and Rajamani, A., 2025. Why have CEO pay levels become less diverse?, *Journal of Finance*, forthcoming.

Maas, K., 2018. Do corporate social performance targets in executive compensation contribute to corporate social performance? *Journal of Business Ethics*, *148*, pp.573-585.

Malenko, N., and Shen Y., 2016. The role of proxy advisory firms: Evidence from a regression-discontinuity design. Review of Financial Studies 29:3394–427.

Manski, C.F., 1993, Identification of Endogenous Social Effects: The Reflection Problem, *Review of Economic Studies*, 60, 531–542.

Matsusaka, J.G., Ozbas, O. and Yi, I., 2019. Opportunistic proposals by union shareholders. *The Review of Financial Studies*, *32*(8), pp.3215-3265.

Michaely, R., Ordonez-Calafi, G. and Rubio, S., 2024. Mutual funds' strategic voting on environmental and social issues. *Review of Finance*, *28*(5), pp.1575-1610.

Michaely, R. Schmid, T. and Wang, M., 2024. Implicit versus Explicit Contracting in Executive Compensation for Environmental and Social Performance. Working Paper.

Pan, Y., Wang, T.Y. and Weisbach, M.S., 2015. Learning about CEO ability and stock return volatility. *Review of Financial Studies*, *28*(6), pp.1623-1666.

Qin, B. and Yang, L., 2022. CSR contracting and performance-induced CEO turnover. *Journal of Corporate Finance*, *73*, p.102173

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
ISS Peers' Number of Metric Types	Average number of broad metric types (ESG, operating, earnings, market) used by a firm's ISS-designated peers in a given year.	ISS ECA
ISS Peers' Number of Indiv. Metrics	Average number of individual compensation metrics used by a firm's ISS-designated peers in a given year.	ISS ECA
Other Peers' Number of Metric Types	Average number of broad metric types (ESG, operating, earnings, market) used by non-ISS peer firms in the same 6-digit GICS industry in a given year.	ISS ECA
Other Peers' Number of Indiv. Metrics	Average number of individual compensation metrics used by non-ISS peer firms in the same 6-digit GICS industry in a given year.	ISS ECA
ISS Peers - Same Metric	Fraction of a firm's ISS-designated peers that use the same specific compensation metric in a given year.	ISS ECA
Other Industry Peers - Same Metric	Fraction of non-ISS peer firms in the same 6-digit GICS industry 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 26 SASB	ISS ECA

	categories of ESG metrics, 5 categories of operating metrics, 2 categories of earnings metrics, and a market metric.	
Num ESG Metrics	Sum of up to 26 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
Equity Comp	Indicator variable equal to one if the compensation contract of a firm's CEO includes stock options or restricted stock grants, and zero otherwise.	ISS ECA
Share of Equity Comp	Ratio of stock options and restricted stock grants divided by 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
Bad Material Pulse News	Minimum 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
New 1% (5%) Block	Indicator variable equal to one if in a given year, at least one new institutional owner acquires a stake of a firm's equity exceeding 1% (5%).	FactSet Ownership
New 1% (5%) Active Block	Indicator variable equal to one if in a given year, at least one new active institutional owner acquires a stake of a firm's equity exceeding 1% (5%). Active owners are hedge funds, private equity, and venture capital.	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

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 Appendix C 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

Appendix C. 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 in 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) multicultural
(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 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.

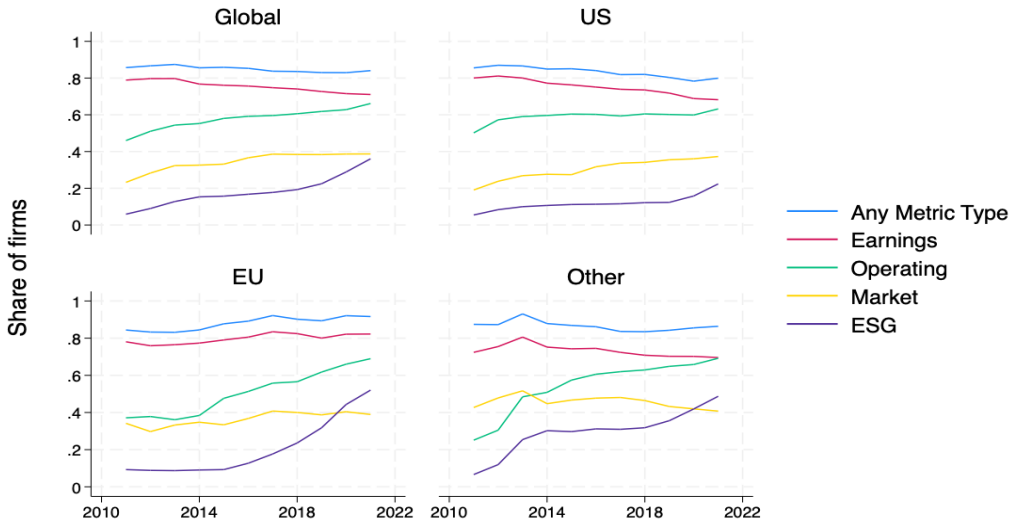


Figure 2. ESG metrics materiality

This figure plots the share of firms with ESG metrics over time, distinguishing between firms with and without material ESG 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.

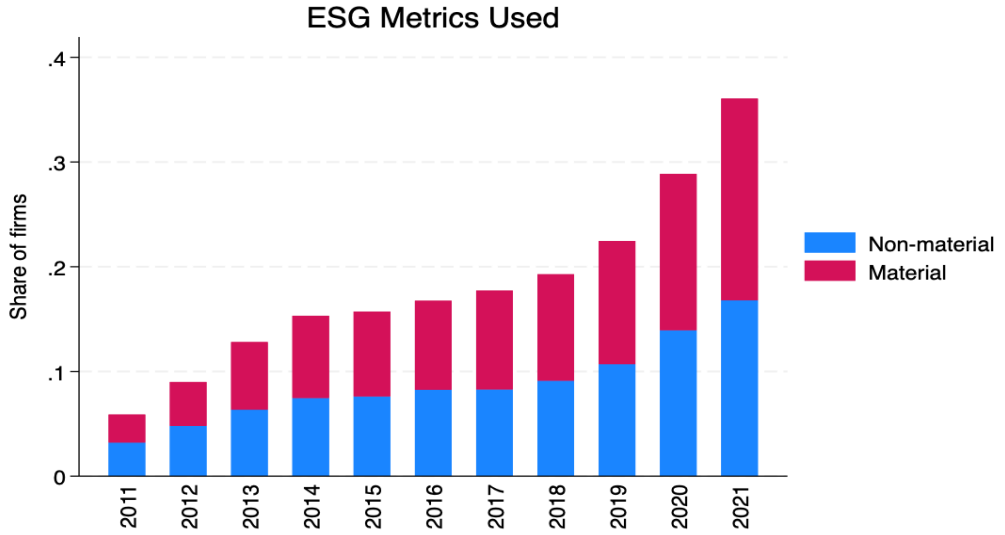
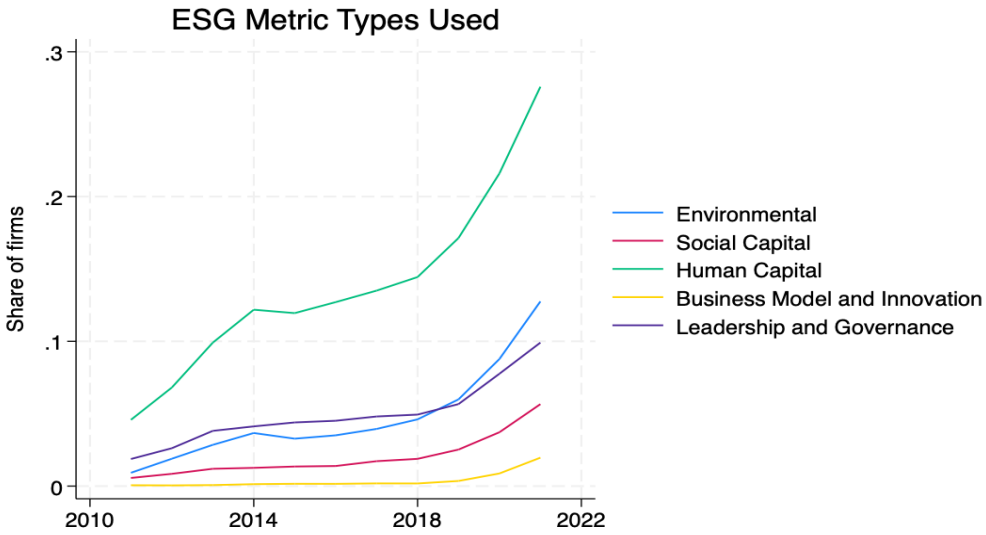


Figure 3. Types of ESG metrics

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

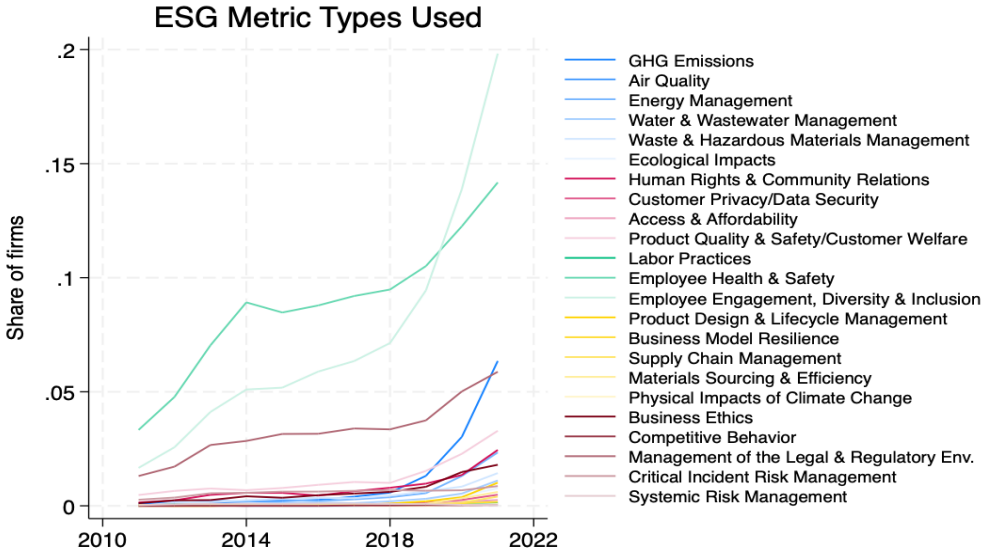


Figure 4. Operating metrics

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.

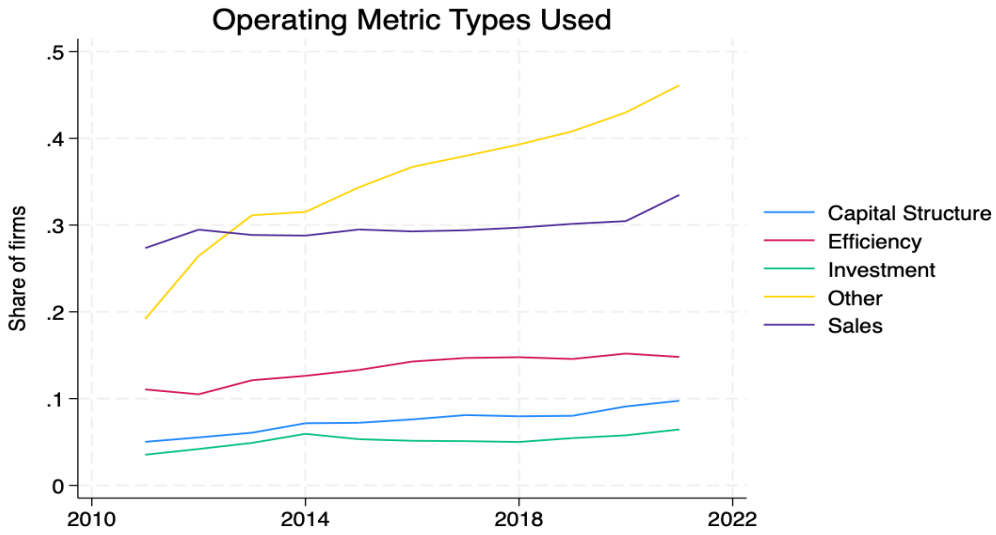
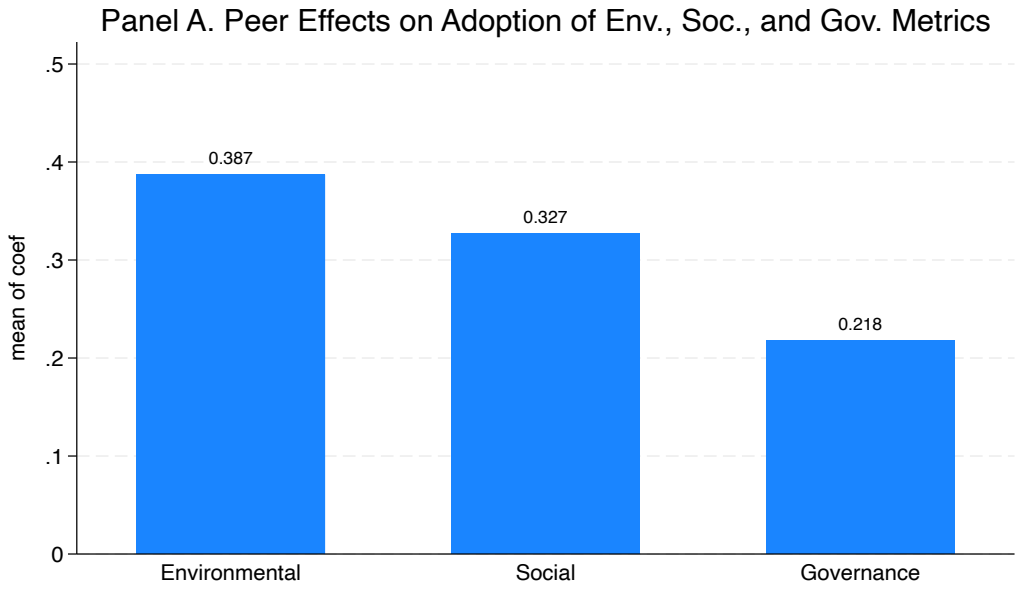


Figure 5. ISS Peers and Metric Adoption

These plots present the coefficients from regressions of first-time metric adoption on ISS peer adoption rates with firm and year fixed effects and standard errors clustered by firm. Panel A compares peer effects across environmental, social, and governance metrics. Panel B compares peer effects across ESG metrics (collectively) versus operating, earnings, and market metrics. The coefficients represent the percentage-point increase in the probability of first-time metric adoption associated with a one percentage-point increase in peer adoption rates.



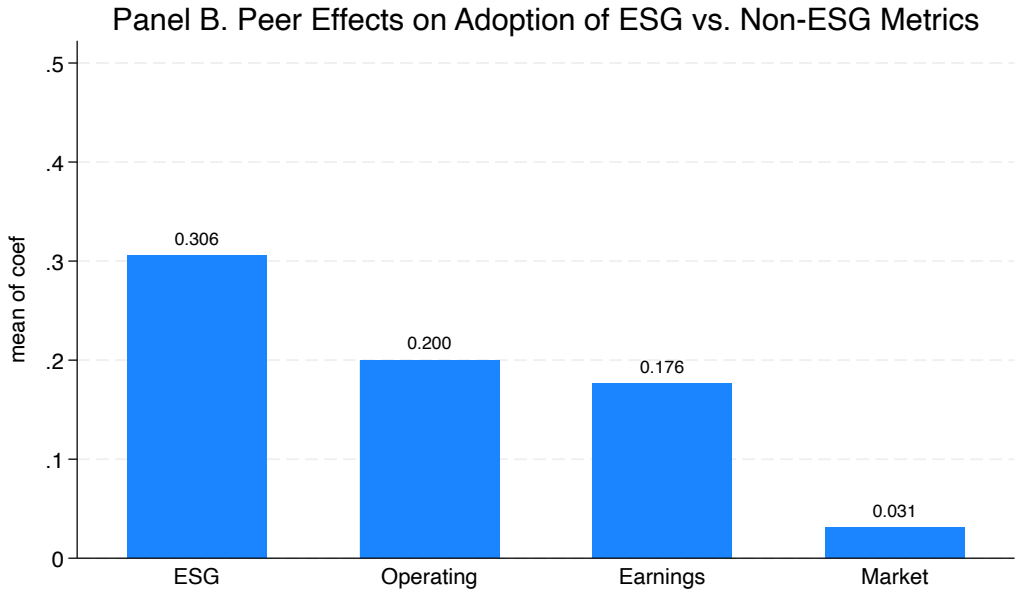


Table 1. Summary statistics

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
Equity Comp	42,488	0.764	0.425	0	1	1
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
Below Avg Material ESG Rank	44,348	0.176	0.381	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
New 1% Block	41,518	0.547	0.498	0	1	1
New 5% Block	41,518	0.19	0.392	0	0	1

New 1% Active Block	41,518	0.22	0.414	0	0	1
New 5% Active Block	41,518	0.051	0.22	0	0	0
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
Num Shareholder Prop (Mgmt. Rec Against)	40,170	0.136	0.621	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-level analysis of ESG and 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) and the number of individual ESG, operating, and earnings metrics on the share of equity-linked compensation to total executive pay. 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 and material ESG metrics

	(1)	(2)
	ESG Metric	Material ESG Metric
Operating Metric	0.1507***	0.0810***
	(22.22)	(14.88)
Earnings Metric	0.0534***	0.0364***
	(6.68)	(5.49)
Market Metric	0.0742***	0.0452***
	(10.35)	(7.83)
Observations	41,516	40,982
Year FE	YES	YES
Industry FE	YES	YES
Country FE	YES	YES
Adjusted R2	0.283	0.266

Panel B. Metrics and equity compensation

	(1)	(2)	(3)	(4)	(5)
	Num Metric Types	Num Metric Types Excl. Mkt	Num ESG Metrics	Num Operating Metrics	Num Earnings Metrics
Share of Equity Comp	0.8722***	0.5093***	0.1746***	0.3975***	0.3268***
	(22.63)	(16.53)	(8.26)	(11.91)	(14.94)
Observations	39,982	39,982	39,982	39,982	39,982
Year FE	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES
Adjusted R2	0.186	0.127	0.213	0.0883	0.142

Table 3. ESG metrics and active block ownership

This table presents analysis of ESG and material ESG compensation metrics as a function of new (active) block ownership, CEO tenure, and other firm characteristics. All firm-level controls (except *CEO Tenure*) are lagged and described 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)
	ESG Metric				Material ESG Metric	
New 1% Block	0.0012					
	(0.22)					
New 1% Active Block		0.0203***			0.0132***	
		(3.29)			(2.83)	
New 5% Block			0.0010			
			(0.16)			
New 5% Active Block				0.0198*		0.0180**
				(1.79)		(2.08)
CEO Tenure	-0.0016***	-0.0016***	-0.0016***	-0.0016***	-0.0011***	-0.0011***
	(-3.44)	(-3.33)	(-3.44)	(-3.39)	(-2.85)	(-2.88)
Log(Var Daily Returns)	0.0168***	0.0159***	0.0168***	0.0166***	0.0155***	0.0159***
	(4.21)	(4.01)	(4.21)	(4.17)	(4.94)	(5.05)
St. Dev. All Pulse News	0.0008**	0.0008**	0.0008**	0.0008**	0.0005*	0.0005*
	(2.25)	(2.23)	(2.26)	(2.26)	(1.90)	(1.92)
St. Dev. Ind-adj. ROE	0.0057	0.0045	0.0056	0.0051	-0.0087*	-0.0084*
	(0.79)	(0.63)	(0.79)	(0.72)	(-1.85)	(-1.80)
Below Avg ESG Rank	-0.0081	-0.0087	-0.0081	-0.0082	-0.0058	-0.0054
	(-1.09)	(-1.18)	(-1.09)	(-1.10)	(-0.96)	(-0.90)
Log Mkt Cap	0.0278***	0.0282***	0.0277***	0.0279***	0.0150***	0.0149***
	(10.77)	(10.87)	(10.72)	(10.76)	(7.22)	(7.17)
Inst Block Own	0.0063	0.0017	0.0062	0.0025	-0.0033	-0.0040
	(0.27)	(0.07)	(0.25)	(0.10)	(-0.18)	(-0.21)
Large Non-Inst Block	-0.0467***	-0.0469***	-0.0468***	-0.0473***	-0.0383***	-0.0387***
	(-5.19)	(-5.21)	(-5.20)	(-5.25)	(-5.15)	(-5.20)
Observations	26,731	26,731	26,731	26,731	26,493	26,493
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	0.274	0.275	0.274	0.274	0.291	0.291

Table 4. ESG compensation metrics – metric-level analysis

This table presents metric-level analysis of ESG compensation metrics. We report regressions examining the first introduction of individual ESG metrics in the CEO's compensation contract. Columns 1-3 investigate the introduction of any ESG metric, while column 4 specifically analyzes the introduction of material ESG metrics. News variables (*Metric-Specific News*, *All Categories Pulse News*, and their negative counterparts) are standardized to have mean zero and standard deviation one, i.e., coefficients represent the effect of a one standard deviation change in the variable. All specifications include lagged values of firm controls, including institutional ownership, non-institutional ownership, and an indicator for a new 1% active ownership block, where active institutional owners are defined as hedge fund, private equity, and venture capital investors. Detailed variable definitions are provided in Appendix A. All models 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.

	(1)	(2)	(3)	(4)
	First ESG Metric			First Material ESG Metric
Metric-Specific News	0.0039***	0.0038***	0.0043***	0.0024***
	(19.64)	(18.74)	(17.51)	(13.58)
Bad Metric-Specific News			-0.0007***	-0.0010***
			(-3.08)	(-5.85)
Below Avg ESG Rank	0.0003	-0.0000	0.0002	0.0003
	(0.40)	(-0.03)	(0.32)	(0.70)
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
	(-2.74)	(-2.61)	(-2.68)	(-0.93)
Bad All Categories Pulse News			0.0000	0.0001
			(0.04)	(0.48)
New 1% Active Block	0.0007	0.0007	0.0007	0.0004
	(1.17)	(1.15)	(1.16)	(1.13)
Inst Block Own	-0.0012	-0.0012	-0.0012	-0.0012
	(-0.55)	(-0.54)	(-0.55)	(-0.90)
Large Non-Inst Block	0.0016	0.0015	0.0016	0.0003
	(1.28)	(1.21)	(1.27)	(0.44)
Observations	341,621	339,605	341,621	339,605
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Adjusted R2	0.0247	0.0250	0.0247	0.0174

Table 5. Operating, earnings, and market metrics

This table presents firm-level analysis of operating (columns 1-2), earnings (columns 3-4), and market (columns 5-6) compensation metrics as a function of new active block ownership, CEO tenure, and other firm characteristics. All firm-level controls (except *CEO Tenure*) are lagged and described 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)
	Operating Metric		Earnings Metric		Market Metric	
New 1% Active Block	0.0223***		-0.0227***		-0.0038	
	(2.58)		(-3.35)		(-0.46)	
New 5% Active Block		-0.0066		-0.0499***		-0.0311**
		(-0.45)		(-4.15)		(-2.44)
CEO Tenure	-0.0026***	-0.0027***	-0.0026***	-0.0026***	-0.0055***	-0.0055***
	(-3.29)	(-3.38)	(-4.28)	(-4.29)	(-7.74)	(-7.80)
Log(Var Daily Returns)	-0.0039	-0.0028	-0.0536***	-0.0541***	0.0000	0.0002
	(-0.74)	(-0.52)	(-12.18)	(-12.25)	(0.00)	(0.04)
St. Dev. All Pulse News	0.0018***	0.0018***	0.0018***	0.0018***	0.0006	0.0006
	(3.64)	(3.65)	(4.96)	(4.93)	(1.18)	(1.18)
St. Dev. Ind-adj. ROE	-0.0049	-0.0035	-0.0549***	-0.0549***	0.0007	0.0013
	(-0.53)	(-0.37)	(-7.24)	(-7.25)	(0.08)	(0.15)
Log Mkt Cap	0.0389***	0.0383***	0.0294***	0.0295***	0.0585***	0.0583***
	(10.01)	(9.86)	(9.89)	(9.96)	(16.13)	(16.06)
Inst Block Own	0.0875**	0.0946***	0.1221***	0.1274***	0.1474***	0.1534***
	(2.52)	(2.69)	(4.63)	(4.77)	(4.51)	(4.63)
Large Non-Inst Block	-0.0887***	-0.0884***	-0.0602***	-0.0590***	-0.1089***	-0.1081***
	(-6.57)	(-6.54)	(-5.84)	(-5.71)	(-8.90)	(-8.83)
Below Avg ESG Rank	-0.0172*	-0.0164	-0.0051	-0.0056	-0.0023	-0.0023
	(-1.71)	(-1.63)	(-0.74)	(-0.82)	(-0.23)	(-0.23)
Observations	26,731	26,731	26,731	26,731	26,731	26,731
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	0.0814	0.0811	0.230	0.230	0.173	0.173

Table 6. Total and variable compensation

This table presents firm-level analysis of total and variable CEO compensation as a function of ESG-related (material) news. *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.

Panel A. Compensation and (material) ESG performance

	(1)	(2)	(3)	(4)	(5)	(6)
	Total Comp	Stock+ Options+ Bonus	Stock+ Options	Total Comp	Stock+ Options+ Bonus	Stock+ Options
All Categories Pulse News	0.0032***	0.0040***	0.0046***	0.0020***	0.0027***	0.0030***
	(6.20)	(8.04)	(8.61)	(3.52)	(4.10)	(4.39)
Material Pulse News				0.0017***	0.0021***	0.0023***
				(3.13)	(3.32)	(3.49)
Metric News	0.0007***	0.0003**	0.0005***	0.0007***	0.0003**	0.0005***
	(5.21)	(2.13)	(3.23)	(5.11)	(2.11)	(3.14)
CEO Tenure	-0.0020	-0.0051**	-0.0064***	-0.0015	-0.0043**	-0.0055**
	(-1.03)	(-2.50)	(-3.02)	(-0.75)	(-2.07)	(-2.56)
3-yr Return	0.0006***	0.0009***	0.0009***	0.0005**	0.0008***	0.0008***
	(2.79)	(3.37)	(2.98)	(2.35)	(2.84)	(2.58)
Log Mkt Cap	0.3957***	0.5079***	0.5232***	0.3910***	0.5004***	0.5164***
	(40.40)	(71.26)	(71.68)	(38.17)	(69.45)	(69.34)
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	0.450	0.525	0.570	0.445	0.524	0.569

Panel B. Compensation and metric types

	(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

Panel C. ESG metrics and news

	(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

Table 7. ISS Peer influence on ESG and non-ESG metric adoption

This table presents a firm-year-metric analysis comparing the influence of ISS-designated peers versus broader industry peers on the adoption of compensation metrics. We report regressions examining the relationship between a firm's first-time adoption of specific metrics and the adoption rates among both ISS-designated peers and other firms in the same industry (GICS classification). Panel A investigates the adoption of ESG metrics (Environmental, Social, and Governance), while Panel B examines non-ESG metrics (Operating, Earnings, and Market). The key independent variables of interest are *ISS Peers - Same Metric*, which represents the fraction of ISS-designated peers using the same metric, and *Other Industry Peers - Same Metric*, which captures the fraction of non-ISS peer firms in the same 6-digit GICS industry using the same metric. Following the approach of ISS, *Other Industry Peers* is only defined when there are at least 24 other firms in the industry of the focal firm. All specifications include lagged values of firm controls, whose definitions are described in Appendix A. All models 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. The influence of ISS peers vs. other industry peers on ESG metric adoption

	(1)	(2)	(3)
	Env Metric	Social Metric	Gov Metric
ISS Peers - Same Metric	0.2923***	0.1749***	0.1055***
	(5.63)	(8.93)	(4.97)
Other Industry Peers - Same Metric	0.5906***	0.3065***	0.3701***
	(6.94)	(10.65)	(10.76)
Material Metric	0.0002	0.0016*	0.0011*
	(0.17)	(1.72)	(1.95)
Metric-Specific News	0.0001***	0.0001***	0.0000*
	(6.81)	(4.19)	(1.94)
All Categories Pulse News	0.0000	-0.0001**	-0.0000**
	(0.31)	(-2.23)	(-2.06)
Below Avg ESG Rank	-0.0003	0.0001	0.0003
	(-0.27)	(0.09)	(0.45)
New 1% Active Block	0.0021*	0.0003	0.0003
	(1.66)	(0.25)	(0.45)
Inst Block Own	0.0019	-0.0016	-0.0033
	(0.46)	(-0.37)	(-1.39)
Large Non-Inst Block	0.0015	0.0020	0.0011
	(0.60)	(0.87)	(0.86)
Observations	72,492	110,951	116,407
Firm FE	YES	YES	YES
Year FE	YES	YES	YES
Adjusted R2	0.0717	0.0807	0.0330

Panel B. The influence of ISS peers vs. other industry peers on non-ESG metric adoption

	(1)	(2)	(3)
	Operating Metric	Earnings Metric	Market Metric
ISS Peers - Same Metric	0.0964***	0.0981***	0.0451*
	(12.73)	(5.62)	(1.89)
Other Industry Peers - Same Metric	0.1735***	0.1352***	-0.0073
	(19.13)	(7.03)	(-0.12)
Below Avg ESG Rank	0.0024	-0.0068	-0.0068
	(1.16)	(-1.03)	(-1.24)
New 1% Active Block	0.0050**	0.0121**	0.0157***
	(2.56)	(2.04)	(2.80)
Inst Block Own	0.0141*	-0.0313	-0.0002
	(1.89)	(-1.36)	(-0.01)
Large Non-Inst Block	-0.0007	0.0054	-0.0117
	(-0.21)	(0.51)	(-1.22)
Observations	127,963	27,045	20,254
Firm FE	YES	YES	YES
Year FE	YES	YES	YES
Adjusted R2	0.0633	0.0998	0.0991

Table 8. Shareholder votes

This table presents an analysis of say-on-pay votes as a function of the number of compensation metrics (metric types) in CEO contracts. In columns 1-2 of Panel A, we present OLS estimates relating say-on-pay approval rates to the number of metric types (column 1) and the number of individual metrics (column 2). Columns 3-6 present IV estimates where we instrument a firm's number of metrics using the corresponding metrics of its ISS peers, controlling for the broader industry trends by including the number of metrics used by other firms in the same industry (GICS). In Panel B, we study the number of metrics as a function of the mean vote against say-on-pay proposals over the past year (columns 1 and 3) or the past three years (columns 2 and 4). In Panel C, we examine the role of ESG and non-ESG metrics on the mean approval rate of say-on-pay proposals. 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

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS			*IV*		
	SOP Approval Rate		First Stage	SOP Approval Rate	First Stage	SOP Approval Rate
Num Metric Types	0.0044***			0.0208***		
	(4.16)			(2.71)		
Num Indiv. Metrics		0.0018***				0.0072*
		(3.01)				(1.83)
ISS Peers' Number of Metric Types			0.4187***			
			(14.65)			
ISS Peers' Number of Indiv. Metrics					0.4542***	
					(14.87)	
Other Peers' Number of Metric Types			0.1727***	-0.0012		
			(3.47)	(-0.22)		
Other Peers' Number of Indiv. Metrics					0.1596***	0.0017
					(2.82)	(0.47)
All Categories Pulse News	0.0001***	0.0001***	0.0019***	0.0001	0.0027***	0.0001**
	(2.82)	(2.92)	(4.02)	(1.50)	(3.47)	(2.09)
Total Comp	-0.0175***	-0.0173***	0.1103***	-0.0196***	0.1772***	-0.0184***
	(-8.58)	(-8.49)	(7.06)	(-8.21)	(7.57)	(-8.05)
3-Year Return	0.0004***	0.0003***	-0.0017***	0.0004***	-0.0033***	0.0004***
	(5.37)	(5.35)	(-4.51)	(4.66)	(-5.07)	(4.58)
Log Mkt Cap	0.0073***	0.0074***	0.0457***	0.0056***	0.0577***	0.0065***
	(6.26)	(6.43)	(4.14)	(3.85)	(3.26)	(4.86)
Inst Block Own	0.0497***	0.0507***	0.2647***	0.0439***	0.2315**	0.0490***
	(7.46)	(7.58)	(3.78)	(5.70)	(2.00)	(6.75)
Large Non-Inst Block	0.0053*	0.0049*	-0.2868***	0.0103***	-0.4114***	0.0078**
	(1.84)	(1.69)	(-10.83)	(2.78)	(-9.48)	(2.31)
Below Avg ESG Rank	-0.0057***	-0.0056***	0.0108	-0.0054**	-0.0007	-0.0052**
	(-2.85)	(-2.82)	(0.53)	(-2.52)	(-0.02)	(-2.41)
Observations	24,430	24,430	27,467	22,019	27,467	22,019
R-squared	0.051	0.050	0.284	0.031	0.286	0.043
First-stage F			214.7		221.1	

Panel B. Say-on-pay against vote

	(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)
All Categories Pulse News	0.0003	0.0003	0.0000	-0.0000
	(0.81)	(0.96)	(0.02)	(-0.03)
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)
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)
Below Avg ESG Rank	0.0029	0.0004	-0.0037	-0.0030
	(0.21)	(0.03)	(-0.14)	(-0.12)
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

Panel C. Shareholder votes and individual metrics

	(1)	(2)	(3)	(4)	(5)
	Mean Say-on-Pay Approval				
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)
All Categories Pulse News	0.0001**	0.0001**	0.0001**	0.0001**	0.0001**
	(2.23)	(2.21)	(2.23)	(2.21)	(2.22)
Total Comp	-0.0215***	-0.0215***	-0.0215***	-0.0215***	-0.0215***
	(-8.85)	(-8.87)	(-8.85)	(-8.88)	(-8.85)
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)
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)
Below Avg ESG Rank	-0.0075***	-0.0075***	-0.0075***	-0.0075***	-0.0075***
	(-3.32)	(-3.32)	(-3.33)	(-3.31)	(-3.33)
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

Table 9. ESG and other shareholder proposals

This table presents analysis of ESG proposals (Panels A and B) and all shareholder-sponsored proposals, excluding proxy contests (Panel C) as a function of (the number of) various compensation metrics included in the CEO contract. *ESG Proposal* is an indicator equal to one if a firm receives at least one shareholder-sponsored ESG proposal in a given year. In columns 1-2 of Panel B (Panel C), we present OLS estimates relating the submission of an ESG proposal (the number of shareholder proposals) to the number of metric types (column 1) and the number of individual metrics (column 2). Columns 3-6 present IV estimates where we instrument the firm's ESG metric in Panel B (number of metrics in Panel C) using the number of metric types or the number of individual metrics of its ISS peers, controlling for the broader industry trends by including the number of metrics used by other firms in the same industry (GICS). All regressions include lagged firm controls 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.

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)
All Categories Pulse News	-0.0007***	-0.0006***	-0.0007***	-0.0007***
	(-6.43)	(-6.20)	(-6.51)	(-6.26)
Total Comp	-0.0033	-0.0016	-0.0033	-0.0016
	(-0.73)	(-0.36)	(-0.73)	(-0.35)
3-Year Return	-0.0004***	-0.0004***	-0.0004***	-0.0004***
	(-4.60)	(-4.59)	(-4.51)	(-4.51)
Below Avg ESG Rank	0.0017	0.0017	0.0019	0.0018
	(0.33)	(0.33)	(0.36)	(0.34)
Log Mkt Cap	0.0372***	0.0387***	0.0372***	0.0387***
	(11.80)	(12.10)	(11.75)	(12.05)
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 - IV analysis

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS			*IV*		
	ESG Proposal		First Stage	ESG Proposal	First Stage	ESG Proposal
Number of Metrics	-0.0150***					
	(-6.04)					
Number of Indiv. Metrics		-0.0077***				
		(-4.89)				
ESG Metric				-0.4869***		-0.3109***
				(-4.59)		(-4.26)
ISS Peers' Num Metric Types			0.0813***			
			(7.30)			
Other Peers' Num Metric Types			-0.0473***	-0.0241*		
			(-2.59)	(-1.89)		
ISS Peers' Number Indiv. Metrics					0.0638***	
					(9.36)	
Other Peers' Number Indiv. Metrics					-0.0174	-0.0071
					(-1.45)	(-0.99)
All Categories Pulse News	-0.0006***	-0.0006***	0.0004***	-0.0004***	0.0004***	-0.0005***
	(-6.18)	(-6.27)	(2.66)	(-3.24)	(2.85)	(-4.28)
Total Comp	-0.0021	-0.0024	0.0109***	0.0027	0.0114***	0.0007
	(-0.47)	(-0.54)	(3.29)	(0.62)	(3.45)	(0.17)
3-Year Return	-0.0004***	-0.0004***	-0.0006***	-0.0008***	-0.0006***	-0.0006***
	(-4.07)	(-4.07)	(-4.34)	(-5.01)	(-4.17)	(-5.41)
Below Avg ESG Rank	0.0027	0.0026	0.0085	0.0065	0.0089	0.0049
	(0.52)	(0.49)	(1.18)	(1.03)	(1.23)	(0.86)
Log Mkt Cap	0.0382***	0.0377***	0.0037	0.0441***	0.0006	0.0408***
	(12.02)	(11.93)	(1.08)	(11.02)	(0.18)	(11.92)
Inst Block Own	-0.1308***	-0.1339***	-0.0410*	-0.1423***	-0.0351	-0.1390***
	(-9.56)	(-9.73)	(-1.72)	(-7.56)	(-1.48)	(-8.45)
Large Non-Inst Block	0.0046	0.0056	-0.0418***	-0.0132	-0.0401***	-0.0057
	(0.85)	(1.03)	(-4.66)	(-1.56)	(-4.50)	(-0.81)
Observations	30,792	30,792	27,467	27,469	27,467	27,469
R-squared	0.305	0.305	0.257		0.260	0.188
Adjusted R2	0.304	0.303				
First-stage F			53.33		87.53	

Panel C. Shareholder proposals

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS			*IV*		
	Num Shr. Prop		First Stage	Num Shr. Prop	First Stage	Num Shr. Prop
Number of Metrics	-0.0273**			-0.1843***		
	(-2.19)			(-2.88)		
Number of Indiv. Metrics		-0.0134*				-0.0614*
		(-1.86)				(-1.69)
ISS Peers' Num Metric Types			0.4187***			
			(14.65)			
Other Peers' Num Metric Types			0.1727***	0.0139		
			(3.47)	(0.40)		
ISS Peers' Number Indiv. Metrics					0.4542***	
					(14.87)	
Other Peers' Number Indiv. Metrics					0.1596***	-0.0049
					(2.82)	(-0.21)
All Categories Pulse News	-0.0024***	-0.0025***	0.0019***	-0.0020***	0.0027***	-0.0022***
	(-6.77)	(-6.74)	(4.02)	(-5.49)	(3.47)	(-6.05)
Total Comp	-0.0304	-0.0311	0.1103***	-0.0089	0.1772***	-0.0192
	(-1.43)	(-1.45)	(7.06)	(-0.46)	(7.57)	(-0.94)
3-Year Return	-0.0018***	-0.0018***	-0.0017***	-0.0025***	-0.0033***	-0.0023***
	(-4.79)	(-4.78)	(-4.51)	(-6.03)	(-5.07)	(-5.86)
Below Avg ESG Rank	0.0109	0.0106	0.0108	0.0196	-0.0007	0.0168
	(0.70)	(0.67)	(0.53)	(1.21)	(-0.02)	(1.05)
Log Mkt Cap	0.1545***	0.1536***	0.0457***	0.1668***	0.0577***	0.1557***
	(9.36)	(9.41)	(4.14)	(8.90)	(3.26)	(8.86)
Inst Block Own	-0.4827***	-0.4882***	0.2647***	-0.4127***	0.2315**	-0.4586***
	(-10.96)	(-10.92)	(3.78)	(-8.93)	(2.00)	(-10.22)
Large Non-Inst Block	-0.0007	0.0013	-0.2868***	-0.0532**	-0.4114***	-0.0263
	(-0.04)	(0.09)	(-10.83)	(-2.13)	(-9.48)	(-1.19)
Observations	29,235	29,235	27,467	26,121	27,467	26,121
R-squared	0.211	0.211	0.284	0.170	0.286	0.198
Adjusted R2	0.209	0.209				
First-stage F			214.7		221.1	

Table 10. Opposition against management

This table presents an analysis of shareholder votes against management as a function of the number of compensation metrics in the CEO contract. In columns 1-2, we present OLS estimates relating votes against management to the number of metric types (column 1) and the number of individual metrics (column 2). Columns 3-6 present IV estimates where we instrument for a firm's number of metrics using the corresponding metrics of its ISS peers, controlling for the broader industry trends by including the number of metrics used by other firms in the same industry (GICS). All regressions control for the contemporaneous total CEO compensation and lagged firm controls 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)
	OLS			*IV*		
	Vote Against Mgmt		First Stage	Vote Against Mgmt	First Stage	Vote Against Mgmt
Number of Metrics	-0.0028***			-0.0096***		
	(-6.13)			(-3.09)		
Number of Indiv. Metrics		-0.0011***				-0.0042***
		(-4.19)				(-2.60)
ISS Peers' Num Metric Types			0.4187***			
			(14.65)			
Other Peers' Num Metric Types			0.1727***	-0.0023		
			(3.47)	(-0.96)		
ISS Peers' Number Indiv. Metrics					0.4542***	
					(14.87)	
Other Peers' Number Indiv. Metrics					0.1596***	-0.0010
					(2.82)	(-0.66)
All Categories Pulse News	-0.0001**	-0.0001***	0.0019***	-0.0000	0.0027***	-0.0000**
	(-2.47)	(-2.60)	(4.02)	(-1.52)	(3.47)	(-1.96)
Total Comp	0.0028***	0.0027***	0.1103***	0.0036***	0.1772***	0.0032***
	(4.23)	(4.04)	(7.06)	(4.72)	(7.57)	(4.40)
3-Year Return	-0.0001***	-0.0001***	-0.0017***	-0.0001***	-0.0033***	-0.0001***
	(-3.23)	(-3.20)	(-4.51)	(-4.54)	(-5.07)	(-4.45)
Below Avg ESG Rank	0.0016*	0.0016*	0.0108	0.0013	-0.0007	0.0012
	(1.90)	(1.87)	(0.53)	(1.41)	(-0.02)	(1.27)
Log Mkt Cap	-0.0058***	-0.0060***	0.0457***	-0.0051***	0.0577***	-0.0055***
	(-14.60)	(-14.91)	(4.14)	(-9.48)	(3.26)	(-11.12)
Inst Block Own	-0.0212***	-0.0218***	0.2647***	-0.0198***	0.2315**	-0.0219***
	(-7.12)	(-7.30)	(3.78)	(-6.05)	(2.00)	(-6.88)
Large Non-Inst Block	-0.0006	-0.0003	-0.2868***	-0.0030*	-0.4114***	-0.0020
	(-0.50)	(-0.26)	(-10.83)	(-1.89)	(-9.48)	(-1.42)
Observations	28,818	28,818	27,467	25,780	27,467	25,780
R-squared	0.104	0.102	0.284	0.090	0.286	0.094
Adjusted R2	0.102	0.100				
First-stage F			214.7		221.1	

Table IA.1. Operating and earnings metrics

This table presents firm-level analysis of operating and earnings compensation metrics, including cashflow, profitability, and sales metrics in Panel A, and efficiency, investment, and capital structure metrics in Panel B. All regressions include lagged firm-level controls 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.

Panel A. Cashflow, profitability, and sales metrics

	(1)	(2)	(3)	(4)	(5)	(6)
	Cashflow Metric		Profitability Metric		Sales Metric	
Ind-adj. CF/Assets	-0.0430*	-0.0434*				
	(-1.66)	(-1.68)				
St. Dev. Ind-adj. CF/Assets	-0.0600***	-0.0607***				
	(-2.60)	(-2.63)				
Ind-adj Profitability			0.2068***	0.2075***		
			(7.56)	(7.62)		
St. Dev. Ind-adj Profitability			-0.2782***	-0.2754***		
			(-10.67)	(-10.59)		
Ind-adj Sales/Assets					-0.0202*	-0.0213*
					(-1.70)	(-1.80)
St. Dev. Ind-adj Sales/Assets					0.0442	0.0495
					(1.26)	(1.41)
New 1% Block	-0.0022		0.0082		0.0170**	
	(-0.32)		(1.41)		(2.37)	
New 1% Active Block		0.0051		-0.0208***		-0.0053
		(0.66)		(-3.01)		(-0.61)
CEO Tenure	-0.0038***	-0.0038***	-0.0026***	-0.0027***	-0.0025***	-0.0026***
	(-6.03)	(-5.99)	(-3.98)	(-4.08)	(-3.18)	(-3.23)
Log(Var Daily Returns)	-0.0029	-0.0031	-0.0503***	-0.0491***	-0.0238***	-0.0232***
	(-0.57)	(-0.64)	(-11.14)	(-10.94)	(-4.72)	(-4.66)
St. Dev. Ind-adj. ROE	0.0385***	0.0382***	-0.0341***	-0.0329***	-0.0248**	-0.0243**
	(4.01)	(3.98)	(-4.58)	(-4.40)	(-2.39)	(-2.34)
Log Mkt Cap	0.0483***	0.0485***	0.0214***	0.0207***	0.0318***	0.0312***
	(14.06)	(14.04)	(6.80)	(6.58)	(8.57)	(8.36)
Inst Block Own	0.1284***	0.1260***	0.0264	0.0359	0.0170	0.0272
	(3.94)	(3.86)	(0.94)	(1.27)	(0.50)	(0.79)
Large Non-Inst Block	-0.0437***	-0.0436***	-0.0504***	-0.0508***	-0.0340***	-0.0348***
	(-4.08)	(-4.08)	(-4.60)	(-4.63)	(-2.59)	(-2.65)
Below Avg ESG Rank	-0.0115	-0.0117	-0.0005	0.0003	-0.0082	-0.0079
	(-1.19)	(-1.21)	(-0.07)	(0.04)	(-0.82)	(-0.79)
Observations	26,721	26,721	26,314	26,314	26,731	26,731
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	0.112	0.264	0.264	0.180	0.179

Panel B. Efficiency, investment, and capital structure metrics

	(1)	(2)	(3)	(4)	(5)	(6)
	Efficiency Metric		Investment Metric		Capital Structure Metric	
Ind-adj. COGS/Sales	-0.0000	-0.0000				
	(-0.02)	(-0.01)				
St. Dev. Ind-adj. COGS/Sales	0.0000	0.0000				
	(0.15)	(0.14)				
Ind-adj. PPE/Assets			0.0910***	0.0909***		
			(5.49)	(5.50)		
St. Dev. Ind-adj. PPE/Assets			0.0866	0.0872		
			(1.33)	(1.34)		
Ind-adj. Book Leverage					0.0007***	0.0007***
					(4.25)	(4.22)
St. Dev. Ind-adj. Book Leverage					-0.0014***	-0.0014***
					(-3.64)	(-3.67)
New 1% Block	0.0020		0.0091**		0.0019	
	(0.33)		(2.40)		(0.45)	
New 1% Active Block		0.0093		0.0081**		0.0064
		(1.42)		(2.17)		(1.27)
CEO Tenure	-0.0010*	-0.0010*	0.0011***	0.0011***	0.0009*	0.0009*
	(-1.88)	(-1.84)	(2.80)	(2.81)	(1.93)	(1.95)
Log(Var Daily Returns)	0.0038	0.0033	0.0003	0.0001	0.0099***	0.0096***
	(0.94)	(0.83)	(0.12)	(0.05)	(3.15)	(3.06)
St. Dev. Ind-adj. ROE	0.0002	-0.0003	-0.0086**	-0.0089***	0.0008	0.0005
	(0.03)	(-0.04)	(-2.49)	(-2.58)	(0.15)	(0.10)
Log Mkt Cap	0.0082***	0.0084***	0.0039**	0.0039**	-0.0072***	-0.0071***
	(3.00)	(3.06)	(2.49)	(2.44)	(-3.00)	(-2.97)
Inst Block Own	-0.0138	-0.0150	0.0281*	0.0309*	-0.0365	-0.0368
	(-0.53)	(-0.57)	(1.67)	(1.85)	(-1.59)	(-1.60)
Large Non-Inst Block	-0.0306***	-0.0307***	-0.0117**	-0.0121**	-0.0316***	-0.0316***
	(-3.20)	(-3.21)	(-1.99)	(-2.07)	(-4.31)	(-4.31)
Below Avg ESG Rank	-0.0046	-0.0049	-0.0037	-0.0038	-0.0023	-0.0025
	(-0.59)	(-0.63)	(-0.80)	(-0.85)	(-0.41)	(-0.45)
Observations	22,275	22,275	26,173	26,173	23,590	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	0.0963	0.0964	0.0864	0.0863	0.111	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 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. Operating and earnings metrics

This table presents regressions of CEO compensation on sales, cashflow, and efficiency metrics and their interactions with 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.

	(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