

Corporate Executive Protection*

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Abstract

Leading a large, public-facing enterprise exposes the CEO to non-financial, off-the-job security risks. Unaddressed, these risks potentially influence the CEO's on-the-job decisions and reduce firm value. We study the board's adoption of and expenditures on personal security policies to protect the CEO. One in three S&P 500 firms disclose expenditures to protect the CEO either at home, on their commute, or during personal travel. We find that a CEO with greater decision authority or visibility, or who undertakes a workforce reduction, receives more protection. The results highlight a novel risk faced by top decision-makers, and are consistent with boards actively managing their personal risk exposure on behalf of shareholders.

Keywords: risk, security, executive protection, contracting, decision rights, visibility, layoffs
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1 Introduction

Corporate executive protection has gained increasing attention in recent years, a trend reinforced by the fatal attack on UnitedHealthcare CEO Brian Thompson in December 2024 and the Russian plot to assassinate the CEO of German arms manufacturer Rheinmetall in July 2024.¹ Companies report growing levels of threats and invest more in security measures that protect executives, and often their families, outside of work.² In roundtable discussions with the U.S. Securities Exchange Commission (SEC) in June 2025, participants emphasized the growing need for executive protection in the current environment and the central role of companies in funding and arranging security protocols, both at work and beyond.³ However, a 2024 survey by the Diplomatic Security Service found that CEOs may not want, or understand the need for, personal security.⁴ CEO resistance hinders the board's ability to incorporate executive protection into the firm's security program. In our sample of S&P 500 firms, the share of companies reporting any off-the-job security for their CEO has exceeded 30% every year since 2006, and reached 46% in fiscal year 2024.⁵ In this paper, we examine the board's decision to extend this protection to the CEO.

Boards actively manage the risk the CEO faces. This involves convex payouts in compensation contracts that overcome CEO risk-aversion arising from under-diversified portfolios [Coles, Daniel and Naveen, 2006], golden parachute plans that insure the CEO against loss of future income arising from a potential takeover [Lambert and Larcker, 1985], or indemnification against “profitable misconduct” [Admati, Atkinson and Pfleiderer, 2025]. The objective is to reduce the wedge between CEO and shareholder incentives when the CEO has strong decision rights but diverges in their financial risk exposure. In our setting, shareholders expect a CEO to make difficult decisions to maximize shareholder wealth. These decisions may impose costs on the

¹See: [US Reportedly Foiled Russian Plot to Kill Boss of German Arms Firm Supplying Ukraine \(The Guardian, July 11, 2024\)](#).

²See, e.g.: [Threats of Violence Against Company Executives on the Rise, Survey Shows \(Reuters, September 24, 2025\)](#) and [How Corporate Security Has Changed a Year After UnitedHealth Killing \(Wall Street Journal, January 5, 2026\)](#).

³Links to the recordings and the questions guiding the discussions are available at: [SEC Roundtable on Executive Compensation Disclosure Requirements \(June 26, 2025\)](#). Personal security of executives is discussed toward the end of the first panel.

⁴OSAC Benchmarking Report—Executive Protection Threats and Mitigation (U.S. Department of State, Diplomatic Security Service, December 2024).

⁵This is consistent with a recent study documenting that 33.8% of companies report off-the-job security measures for their executives in fiscal years that ended in 2024, relative to 24.4% in 2022 and 23.3% in 2020. For the full report, see: [Executive Security Perks: Evolving Trends in a New Era of Risk \(Equilar, July 2025\)](#).

CEO by placing them, and potentially their family, at risk. The CEO bears the risk, but it can spill over to shareholders when it imposes direct costs, such as productivity losses if a CEO is incapacitated [Bennedsen, Pérez-González and Wolfenzon, 2020; Jenter, Matveyev and Roth, 2024], or indirect costs, such as project avoidance if the CEO is concerned about project-related personal risk, for example, from a workforce reduction [Bassanini, Caroli, Geay and Reberioux, 2024; Guenzel, Hamilton and Malmendier, 2025; Keum and Liu, 2025; Landier, Nair and Julie Wulf, 2007; Yonker, 2017]. To shield the CEO from personal risk arising from their job, the board can extend—and even mandate—off-the-job protection.⁶

We frame the demand for off-the-job security as a contractual solution to the imposition of real or perceived personal risk on the CEO. Job-related personal security risks may arise from individuals and groups who are negatively affected by corporate actions (e.g., layoffs, plant closings, or pollution), those who seek nonpublic information (e.g., foreign governments, competitors, or traders), or those who seek to exploit the CEO for personal financial gain (e.g., through extortion and kidnapping).⁷ We propose that these risks are elevated for the CEO who is more visible to the public and more likely to be viewed as directly responsible for corporate decisions that trigger or intensify potential threats.⁸ This is consistent with research in forensic psychology, which finds that corporate executives face threats similar to both political figures (grievance-fueled violence) and celebrities (fixation-based stalking) [Meloy, Amman and Hoffmann, 2021]. Our framing centers on how boards address the personal risk exposure arising from job characteristics, and is distinct from the effects of environmental factors, such as terrorism risk [Dai, Rau, Stouraitis and Tan, 2020] or local crime rates. We assume that the board has a fiduciary duty to address job-related threats to the CEO's safety and the authority to approve

⁶We include a sample board mandate in the Online Appendix, Section OA.2.

⁷This perception can be amplified by disinformation tactics deployed by foreign governments. See Byman [2025] for a discussion of the growing threat of foreign malign influence and its implications for corporate executive protection in the U.S.

⁸In an ideal world, we would have access to CEO-level threat data to confirm the links between decision authority and visibility, and credible threats. Credible physical threats on social media are rare and unlikely to appear on more prominent and accessible platforms. We explored using social media surveillance services to identify potential threats. However, this method poses challenges: a) it is difficult to identify the CEO, either because they share a name with someone else or because a potential threat may use shorthand or other phrasing that precludes obvious identification, b) we are unable to discern a usable “threat concern score,” because doing so would require real-world investigative work by a trained threat assessor to separate those who “pose a threat” from those who merely “make a threat,” c) we lack access to confirming sources such as incoming messages to the CEO’s email, reference 911 call data from RapidSOS, IP addresses, and language analyses, and d) confirmed threats are not publicly disclosed because they are typically shared confidentially with law enforcement. Although we could not identify a viable mechanism to link actual threats to CEO attributes, we offer anecdotal support for these linkages.

or mandate personal security measures to address them.

Our first prediction is that the CEO with greater decision-making authority is more likely to receive off-the-job security, where decision authority reflects the degree to which the CEO makes key decisions for the firm rather than delegating them. Regardless of the level of formal authority, CEOs vary in their propensity to delegate real authority to subordinates [Aghion and Tirole, 1997; Baiman, Larcker and Rajan, 1995; Baker, Gibbons and Murphy, 1999]. Theoretically, the concentration of decision authority should be driven by the CEO's relative information advantage and by how much they care about the outcome [Aghion and Tirole, 1997; Baker et al., 1999; Harris and Raviv, 2005]. In practice, it varies depending on the CEO's tenure on the job, their influence over governance and investment opportunities, and the technical complexity of the firm [Graham, Harvey and Puri, 2015; Li, Minnis, Nagar and Rajan, 2014]. A CEO with greater decision authority also appears to make more extreme decisions, given the lack of moderation by other executives [Adams, Almeida and Ferreira, 2005]. Although decision-making authority arises endogenously, we argue that a CEO with greater authority is more likely to be a natural target because of their perceived responsibility for decisions that negatively affect individuals and groups.⁹

Corporate disclosures offer a window into the role of CEO authority. Meta recently disclosed that “the compensation, nominating & governance committee has authorized an ‘overall security program’ for Mr. Zuckerberg to address safety concerns due to specific threats to his safety arising directly as a result of his position as our founder, CEO, Chairman, and controlling shareholder” (Form DEF 14A filed April 17, 2025). Similarly, BlackRock disclosed that the company “provides certain security-related services to Messrs. Fink and Kapito to address potential threats to their safety that have originated in connection with their roles as CEO and President of the Company, respectively” (Form DEF 14A filed April 14, 2023). At Yum! Brands “Mr. Novak [CEO] has been physically assaulted while traveling and he and his family have received letters and calls at his home from people around the globe with various special interests, establishing both an invasion of privacy and implicit or explicit threats” (Form DEF 14A filed April 5, 2013).

We also predict that a CEO's need for personal security increases with their public visibility.

⁹Moreover, because a high-authority CEO is more likely to know more, they become more valuable targets of surveillance by foreign intelligence and competitors [Meloy et al., 2021].

CEO visibility or prominence appears to drive an increased need for executive protection based on evidence from corporate surveys [Diplomatic Security Service, 2024], discussions with former security executives, and intuition. The visible CEO is more salient and accessible. This lowers the cost for a malicious actor to obtain personal information about the CEO, exposes the CEO to fixation- or grievance-driven threats, and increases the exposure of the CEO or their family to exploitative crimes such as kidnapping or extortion [Vannini, Detotto and McCannon, 2015]. Visibility is boosted by media coverage, which depends on factors such as firm size, controversy, and nonconformity, as well as the CEO's personality, availability, demographics, and political ideology [Blankespoor and deHaan, 2020; Call, Emett, Maksymov and Sharp, 2022; Hayward, Rindova and Pollock, 2004; Lovelace, Bundy, Pollock and Hambrick, 2022; Marshall, Wegner and Zechman, 2025]. It is further increasing in the CEO's digital footprint, attendance at public events, and predictable travel patterns. Visibility can overlap with decision authority when the CEO personally communicates controversial and consequential decisions or has a personality that seeks both authority and visibility [Chatterjee and Pollock, 2017]. Nevertheless, it increases the CEO's security risk regardless of how decision rights are allocated in the organization.

Corporate boards refer to the visibility of both the firm and the CEO to justify security. For example, PepsiCo discusses its security program for CEO Indra Nooyi as motivated by “real and present risks for Ms. Nooyi due to her considerable visibility in multimedia venues as the leader and identifiable face of PepsiCo, one of the largest and most recognized U.S. corporations.” (DEF 14A filed March 22, 2013). Likewise, Southern Co states that “Given Mr. Fanning’s [CEO] profile and high visibility, we believe that the costs of his security program are appropriate and a necessary business expense and that we can benefit from the added security measures for him.” (DEF 14A filed April 26, 2022). Intel describes the importance of “public prominence, visibility, and accessibility, as well as trends in the overall security climate” as the reason why “the Board and Compensation Committee believe that providing these personal security benefits for [...] Mr. Gelsinger [CEO], continue to be the right approach for executive safety and for Intel and its stockholders” (DEF 14A filed March 28, 2024).¹⁰

¹⁰FOX Corporation appears to touch on both decision responsibility and visibility in discussing security spending for the board chair and CEO: “the FOX brand may be subject to significant publicity related to the Company or its operations, content and individuals associated with its content [...] Due to their tenure and prominence in our industry [the Executive Chair and CEO] face enhanced personal risk from being viewed as extensions of the FOX brand.” They further reference their desire for the executive to comply with the plan: “In light of the risk inherent in their roles and the potential adverse impact this risk could have on the Company, the Compensation Committee [...] considers our named executive officers’ adherence to this plan within the best

Finally, we predict that security responds to transitory increases in CEO risk, holding visibility and decision authority constant. Many, if not most, security responses will arise from potential threats whose sources and existence are unobservable to anyone outside of law enforcement and the executive protection team. The empirical challenge in testing this hypothesis is to identify an observable event that is both common and likely to result in a measurable increase in the risk faced by a core decision-maker. Layoffs or downsizing events meet these criteria in that they are common, salient to the CEO, and a candidate risk factor. [Guenzel et al. \[2025\]](#) suggest that the stress of significant layoffs from restructuring reduces CEO lifespan by roughly 2 years. They attribute their finding to CEOs internalizing responsibility for the welfare of individual employees and their families. In France, CEOs concentrate layoffs in areas farther from their offices, presumably to increase the distance between themselves and potential local discontent [\[Bassanini et al., 2024\]](#). In the U.S., CEOs concentrate workforce reductions further from their birthplace [\[Yonker, 2017\]](#) and corporate headquarters [\[Landier et al., 2007\]](#).

These workforce reduction patterns may also be attributed to CEO concerns about retribution. Employment stressors were present in roughly one-third of mass attacks in the U.S. between 2016 and 2020, and roughly 13% were affiliated with the attack site as a current or former employee [\[Carlock and Cutler, 2023\]](#). Firms are increasingly using disgruntled employees' social media profiles to identify threats [\[Diplomatic Security Service, 2024\]](#). Security professionals confirm that employee terminations heighten the need for executive protection, given their potential to trigger grievance-fueled violence. To illustrate, Brown-Forman provided CEO Lawson Whiting with personal security "associated with the company's announcement of a restructuring in January 2025" (DEF 14A filed June 20, 2025). These layoffs affected 12% of the company's global workforce. In 2012, Eastman Kodak, following guidance from external advisors, "determined that [heightened security] services were necessary and appropriate for a company in bankruptcy, given potential threats to the safety and security of our executive officers and their immediate family members" and that the services "primarily included security guards who were stationed at the homes of Messrs. Perez [CEO] [...] and personal security protection for Mr. Perez." (Form 10K/A filed April 30, 2012). The firm laid off approximately 3,700 employees in connection with the reorganization, comprising over 20% of Eastman's global workforce. These cases illustrate the board's heightened concern about personal safety when

interests of the Company" (DEF 14A filed September 26, 2024).

the CEO oversees significant workforce reductions.

In general, disclosure rules do not require firms to report expenditures on executive protection and corporate security. A key exception is the cost of security that relates to protecting the executive and their family “off-the-job.” Under current SEC rules (discussed in detail in Section 2.1), corporate spending on executive home security and personal transportation is classified as an executive perquisite. It must be disclosed, subject to materiality thresholds, in the Summary Compensation Table of the proxy statement. These disclosures do not depend on tax rules (which affect the employee’s ability to exclude the expenditures from taxable income). However, these disclosures are inherently self-selected, reflecting the board’s deliberate decision to mandate and pay for security and to expose the CEO’s security to the public.¹¹

From these disclosures, we compile a dataset of security policies and expenditures for the CEOs of 664 firms included in the S&P 500 at any point between 2006 and 2024, representing slightly more than 10,000 CEO-year observations. The disclosures allow us to identify three distinct domains of the CEO’s off-the-job protection: residential and physical security for the CEO and their family; the use of a company vehicle (possibly armored) and security driver (likely trained in evasive driving techniques); and the security-motivated use of corporate aircraft for personal travel (often mandated by the board).¹² For brevity, we refer to these domains as home, car, and air security, respectively.

In 2006, the first year of the current disclosure regime, over 36% of firms reported spending on security for their CEOs. This frequency steadily declined to 31.0% by 2013, but increased to 46.4% by 2024. In an average year, 2.4% of sample firms add or subtract at least one element of a given CEO’s coverage. Individually, home, car, and air security follow a similar pattern during our sample period. Approximately 33% of firms that disclose spending on home security for the CEO do not disclose the dollar amount because it falls below reporting thresholds (the greater of \$25,000 or 10% of total perquisites included in the Summary Compensation Table).

¹¹ Disclosure thus suggests that boards perceive not just costs but also potential benefits from corporate-provided security. A potential benefit lies in deterrence, which prior work argues can outweigh the costs of disclosing private information (and may explain why many firms in our sample appear to voluntarily disclose the security amount even though it falls below the SEC’s bright-line threshold). Deterrence benefits can be material, for example, when coordinating counterterrorism efforts [Shapiro and Siegel, 2010], tracking activities in subway systems with surveillance cameras [Priks, 2015], or securing residential property with burglar alarms or “beware of the dog” signs [Logie, Wright and Decker, 1992].

¹² Security motivations include a board-mandated or -recommended aircraft use policy, explicit statements about the need for safety and/or security, or the existence of home or car security expenditures. Our main tests exclude aircraft use when there are no indications of security needs, as they may be differently influenced by private benefit motives [Lee, Lowry and Shu, 2018; Yermack, 2006, 2014].

For firms that disclose car and air security, 22% and 3% do not disclose the cost. When firms disclose the cost of home security, it accounts for 0.3% of the median CEO's total compensation. This figure is 0.2% for car security and 0.8% for air security. Our primary results focus on home and air security policies. We consider car security in additional analyses.

Consistent with the decision authority hypothesis, our evidence suggests that the board is more likely to provide home and air security to the CEO who also chairs the board, and to initiate these security measures the longer the CEO remains in office. Across firms, for example, a CEO who also chairs the board is about 10 percentage points more likely to receive security than a CEO who does not. Our evidence also suggests that the CEO's time in office and as board chair are particularly influential in explaining the magnitude of spending once a policy is adopted. Within the firm, for example, an appointment as board chair is associated with a 30% larger home security budget, while increasing tenure from six to ten years (roughly the median to the third quartile) is associated with a 10% larger budget.

Consistent with the visibility hypothesis, an increase in attention to a CEO's Wikipedia page (as measured by the number of edits) reliably predicts home and air security. This proxy for CEO prominence explains significantly higher probabilities of security coverage and spending on security. These effects are present both across firms and within firms over time.

In our analysis of reorganizations involving workforce reductions, we consider layoff events within a three-year window centered on the security year to test for anticipatory, reactive, and residual security needs. Our results indicate that home security appears more likely in firms that announce layoffs in the prior, current, or following year. For both home and air security, the strongest response occurs the year ahead of the layoff announcement. When we focus on a subset of layoff events with the most negative contemporaneous sentiment, effects appear even stronger. The probability that the CEO of a firm undergoing a severe layoff event receives home or air security is around 4 to 7 percentage points higher than that of other CEOs around the announcement. Within the firm, the security response appears strongest in the year ahead of the announcement.

Our primary focus is on understanding the degree to which CEO attributes determine security decisions. However, we control for a variety of firm-level characteristics that are likely to correlate with the centralization of decision authority, visibility, and other potential determinants of job-related security risk, such as private information and wealth. These controls

include size, market-to-book, R&D intensity, and return volatility. We also account for some board of directors' characteristics, including size and independence, as the board is responsible for determining the need and approving the budget for the CEO's security. Firm size is the only reliable predictor of CEO security, across and within firms, and for both the provision of and budget for home and air security. This is consistent with the notion that firm size is correlated with the CEO's visibility, as highlighted by the PepsiCo anecdote above.¹³

In additional analyses, we focus on the role of reputation-based risk arising from controversial business practices. Our evidence suggests that home and air security are more common in firms with high ESG risk. This result holds primarily across firms, suggesting that firm-level controversial business practices are relatively stable but important to the security decision. We also find that security spending is reliably higher for mining and energy firms, conditional on having security policies. However, when we consider the often controversial practice of large CEO compensation packages—measured by excess compensation and the gap between the compensation of the CEO and other executives—we find little consistent evidence that excess pay is correlated with corporate executive protection, although CEOs who receive a bigger slice of top executive pay are more likely to receive home or air security.

We also consider alternative visibility measures based on the CEO's Wikipedia page views (available for the last half of our sample period) and coverage of the CEO or the firm in the Wall Street Journal (WSJ). Page views are a reliable predictor of security, similar to page edits. WSJ coverage of the firm predicts a higher likelihood of security across firms. However, WSJ coverage of the CEO is associated with a lower likelihood of air (but not home) security.

Car security is the least common policy disclosed by firms, but the CEO's commute is a key risk factor. We find that CEOs who chair the board are significantly more likely to receive car security. CEOs who are more visible are more likely to receive car security, and they receive more as their visibility increases. These results are robust to controls for city characteristics and reinforce the evidence on home and air security.

Our paper contributes to the literature on managerial risk-taking that studies how executives' exposure to risk affects the design of their contracts. This literature usually emphasizes

¹³In untabulated analyses, we gathered security data for all CEOs in ExecuComp in 2016. Security coverage drops off rapidly below the S&P500, to less than 2% for S&P MidCap 400 firms and less than 1% for S&P SmallCap 600 firms.

financial risk. For example, Armstrong, Glaeser and Huang [2022] examine how the board responds to a plausibly exogenous change in the CEO’s ability to control their firm’s exposure to risk and shows that total compensation and equity incentives adjust, consistent with an adjustment of the required risk premium and risk-taking incentives. Admati et al. [2025] analyze how boards shield the CEO from the risk of personal liability when corporate misconduct is profitable. We introduce a non-financial source of risk—executives’ personal safety off the job—and explore publicly available data on an instrument boards can use to mitigate this risk: physical protection for the CEO and their family, both at home and while traveling. Our results show that this protection is in place at an increasing number of firms and appears to be driven by the CEO’s decision authority, secular visibility, and transitory increases in risk surrounding workforce reductions.

Our paper also contributes to the literature on the structure and allocation of decision authority within firms [Fama and Jensen, 1983; Graham et al., 2015; Malenko, 2024]. Broadly, this literature focuses on understanding how the company allocates and monitors decision-making within the firm. Our evidence offers a novel consideration in the decision to allocate decision authority: the increased personal risk to the decision-maker. Just as a risk-averse manager with decision rights must have the right financial incentives to make the decisions shareholders want [Nagar, 2002], their contracts must also include non-financial mechanisms that shield them from personal security risks they alone face. This risk is particularly acute around decisions such as layoffs, and we offer another reason why CEOs are averse to them [Guenzel et al., 2025; Keum and Liu, 2025]

Our evidence also has implications for the growing literature on CEO visibility. The CEO who invests in self-promotion lowers journalists’ costs to produce content and can use firm disclosures, such as press releases, to do so [e.g., Blankepoor and deHaan, 2020; Lovelace et al., 2022]. In addition, a CEO who is distinctive, or whose firm differs markedly from peers, is likely to attract more media coverage [e.g., Call et al., 2022; Hayward et al., 2004; Lovelace et al., 2022]. Our evidence suggests that high visibility increases the CEO’s personal security risk and the attendant costs to protect them, and implies that security risks should factor into the CEO’s media presence.

Physical and digital security is a large and growing expenditure for corporations. Personnel security, including coverage for employees off-the-job, is a growing concern given the strategic

value of intellectual property, rising workplace violence, increasing wealth and public visibility of CEOs, and political extremism. For academics, we expect our evidence to stimulate a deeper discussion of the importance of the non-financial risks that executives bear when leading large, public-facing enterprises. Future research can incorporate these risks into models of incentive contracts, the allocation of decision rights, and media interaction.¹⁴ For practitioners, our evidence provides boards and corporate security executives with large-sample evidence on the factors that appear to drive their peers' decisions to institute security policies.

2 Setting and Data

2.1 Institutional Setting

The source data for this study are obtained from the executive compensation disclosures filed with the SEC. Under SEC disclosure requirements, corporate policies for and expenditures on security for executives while off-the-job fall under the compensation reporting and disclosure requirements of Item 402 of Regulation S-K. These disclosures can be found in the firm's Compensation Discussion and Analysis (CD&A, Item 402(b)) and the footnotes to the Summary Compensation Table (Item 402(c)).

The CD&A section will often (but not always) include a narrative description of the board's security position with respect to the CEO, especially when the expenditures are material. While the disclosures do not detail specific elements of the security plan, they often discuss the principles behind and rationale for providing security. Because such expenses can be large, classified as perquisites in public disclosures, and are often attacked in the popular press, companies often devote space to defending the business interests of the executive security plan. This provides the detail needed to identify when personal use of the corporate aircraft is explicitly required or encouraged, or has some other stated security motivation, when the CEO is provided with a security driver (versus personal use of corporate cars without a driver), and other variations.

Salesforce, for example, when describing CEO Marc Benioff's security program, explains that "the Compensation Committee directed the Company to engage an outside firm with security expertise to conduct a study of Mr. Benioff's security profile and program [...] the Outside

¹⁴This should also include the format of shareholder meetings [Brochet, Chychyla and Ferri, 2024], as in-person meetings are significantly more risky for executives.

Security Study concluded that the comprehensive security measures in place for Mr. Benioff are essential and commensurate with his risk profile” and that the costs reported are associated with “security measures to protect Mr. Benioff on a 24-hour basis.” [DEF 14A filed May 16, 2024]. The explicit discussion of comprehensive or overall “security programs” recommended by independent, third-party, or outside consultants is common in these disclosures. It stems from tax rules that exclude certain expenditures for executive protection from the employee’s taxable income if they are part of an overall security program and are based on recommendations from an independent security study (or involve continuous, 24-hour coverage).¹⁵

The Summary Compensation Table, including its footnotes, contains details on specific amounts, if any. If the firm covers the costs of security measures that protect the CEO off the job, the SEC requires, in most circumstances, disclosure of the corresponding expenditures as perquisites.¹⁶ Specifically, since 2006, Item 402(c)(2)(ix)(A) of Regulation S-K compels firms to disclose costs classified as perquisites if the aggregate amount of perquisites and personal benefits for an executive exceeds \$10,000. If the aggregate amount is disclosed, firms must identify perquisites by type, regardless of their amount, and quantify those whose value exceeds the greater of \$25,000 or 10% of the aggregate amount in a footnote to the Summary Compensation Table. Therefore, for CEOs with perquisites totaling more than \$10,000, we can observe off-the-job protection per se, but not always the cost of security measures whose value lies below the threshold for quantification (at least \$25,000). For CEOs whose perquisites total less than \$10,000, we cannot always determine whether they receive protection. While this implies incomplete coverage of personal security packages of comparatively low value, we do

¹⁵Securities disclosure rules and tax rules approach off-the-job security differently. On page 76 of Release 33-8732A, the SEC states: “[A] company’s decision to provide an item of personal benefit for security purposes does not affect its characterization as a perquisite or personal benefit.” and “examples of items requiring disclosure as perquisites or personal benefits under Item 402 include [...] personal travel otherwise financed by the company [...] security provided at a personal residence or during personal travel, commuting expenses (whether or not for the company’s convenience or benefit). Under §132 of the Internal Revenue Code and regulation §1.132-5(m), certain expenditures for residential security and personal ground and air transportation will not be taxable to the executive if the executive is deemed to have an “overall security program” as determined by an independent security study. For more details on the rules and regulations surrounding the valuation and taxation of off-the-job personal security for executives, see, e.g.: [The Fringe Benefit Rules Applicable to Protecting Executives \(Tax Executive, August 30, 2025\)](#).

¹⁶Other common perquisites covered by these disclosure rules include financial advice, social club memberships, non-security car allowances, spousal travel, and the use of a company apartment. We do not capture these perquisites in our data as firms generally do not consider security to be in the same category as these other items. Walmart provides a representative example: “Although we do not consider [the CEO’s] required use of company aircraft or his additional security services to be a perquisite or other personal benefit, we have, in accordance with SEC rules, included the related costs in the ‘All Other Compensation’ column of the Summary Compensation table” (DEF 14A filed April 24, 2025).

not consider the loss of information severe in our sample. Our sample comprises CEOs of S&P 500 firms, whose compensation tends to be high relative to CEOs at other firms, and some firms voluntarily disclose more than required, including information on the CEO’s security policy (see [OA.1](#) in the Online Appendix for examples with more extensive discussion). Our sample begins with fiscal years ending after December 15, 2006, as prior SEC disclosure rules imposed a higher reporting threshold and resulted in less disclosure.^{[17](#)}

If security measures are quantified, Item 402(c)(2)(ix) requires disclosure of the incremental cost and the basis for its valuation. This valuation typically relies on variable or avoidable costs, such as the amount billed for third-party services or the cost of purchasing and installing security equipment. For in-house security personnel, it is usually the incremental or avoidable costs. Discussions with security executives revealed that the core executive protection team is nearly always employed by the firm, with outside providers used to meet temporary or travel-related security needs. Personal aircraft use includes variable costs of aircraft operation, including fuel, flight crew expenses, landing fees, ground transportation fees, and other miscellaneous variable expenses (no depreciation). For personal use of a chauffeured company vehicle, the reported expense includes variable costs of car operation and the incremental cost of driver salary.^{[18](#)}

2.2 Personal Security Data

We hand-collect data on CEOs’ off-the-job personal security for fiscal years ending from December 2006 through May 2025, for firms included in the S&P 500 at any point during our sample period.^{[19](#)} We collect policy and expense information from the CD&A and the footnotes to the Summary Compensation Table.

When building our dataset, we classify security into three domains used by firms: residential security (home security, hereafter), ground transportation (car security), and personal use of

¹⁷Two other aspects are relevant to this setting: tax gross-ups and CEO reimbursement. If the firm compensates the CEO for taxes on the benefit (“gross-ups,” increasingly rare), the firm must separately disclose that amount. We do not include tax gross-ups in the recorded expenditure. If the CEO reimburses the firm for some or all of the benefit, we typically only see the net amount. There is often no disclosure of the reimbursed portion; thus, we do not attempt to record it. Based on our readings of the disclosures, the situations involving material reimbursements involve personal use of corporate aircraft that was not motivated by security needs. We consider only aircraft use motivated by security needs in our tests.

¹⁸It is possible for firms to combine reporting discretion with knowledge of the reporting thresholds to manage cost allocations in a way that avoids disclosure. This is something we are unable to observe (outside a few instances of security expense restatements), and this is more likely around the provision of home security and security drivers, for which “boundaries” between on- and off-the-job are less clear.

¹⁹Specifically, we collect data for fiscal years that end between December 31, 2006, and May 31, 2025. To define fiscal years, we assign fiscal years ending in January through May to the previous calendar year and fiscal years ending in June through December to the calendar year in which they end.

corporate aircraft (air security). We focus on security for the CEO, as that is usually the single most important executive and is typically the only executive discussed in disclosed security policies. We assume all home security (including close protection on personal time, but away from home) is security-motivated. For car security, we include only costs incurred for chauffeured car service (e.g., we ignore a car allowance when a driver is not mentioned) to capture instances motivated by security concerns. For air security, we define personal use of the corporate aircraft as security-motivated under the following conditions: the board requires or recommends it, the board justifies it for “safety” or “security” reasons, or the company also provides home or car security.

The security expenses we record include only amounts borne by the company, as these must be disclosed (they are net of any reimbursements from the executive, which are rarely disclosed). The expenses we capture do not include the costs allocated to family accompanying the CEO on business use of the corporate aircraft.

2.3 Other Data

We obtain data on firm characteristics from Compustat and CRSP, board characteristics from BoardEx, and CEO and other top executive characteristics and compensation from ExecuComp. For the CEO’s visibility, we primarily rely on a metric based on Wikipedia attention: edits to the CEO’s page. We use views of the CEO’s page in additional analysis, since data begins only in 2015.²⁰ We supplement Wikipedia visibility metrics with RavenPack data on WSJ articles that feature the CEO or the firm. To identify controversial decisions, we use the intersection of layoff announcements from the CapitalIQ Key Developments database and contemporaneous negative sentiment scores from RavenPack. We also incorporate data on reputation risk exposure from ESG incidents via RepRisk²¹ and undisclosed SEC investigations from [Blackburne, Kepler, Quinn and Taylor \[2021\]](#). Historical industry information is from Compustat and from the 10-K (or similar) header for the headquarters’ state.²² We exclude observations with fiscal years shorter than twelve months, singletons, and firm-years with missing values for any variable, with the exception of R&D. We set missing R&D values to zero and include an indicator variable

²⁰The data are available through the Wikimedia Analytics API; see, e.g.: <https://doc.wikimedia.org/generated-data-platform/aqs/analytics-api/>.

²¹RepRisk coverage starts on January 1, 2007; we aggregate daily values throughout the fiscal year, providing us with data for fiscal years ending on or after December 31, 2007.

²²For historical 10-X header information, we use the dataset provided by Tim Loughran and Bill McDonald: <https://sraf.nd.edu/sec-edgar-data/10-x-header-data/>.

for missing R&D in all of our regression models (but do not tabulate it). For the analyses, we convert monetary values to 2020 dollars²³ and winsorize continuous variables at the 1st and 99th percentiles.

Table 1 shows that we begin the analysis of security policies with a main sample of 10,317 observations for 664 firms and fiscal years 2006–2024. We construct subsamples for most of the other analyses. For the analysis of security expenses, we require firms to report security expenses greater than zero in at least one sample year. For analyses involving compensation measures in general (e.g., security expenses or pay gaps), we exclude data reported under the disclosure regime in place before the 2006 changes, and we exclude firm-years in which the CEO is in office for less than 11 months of the fiscal year. Table 1 reports the number of firms and firm-year observations in each sample. Out of 664 unique firms in our sample, 345 (52%) report at least one year of any type of CEO security. 237 firms (36%) and 261 firms (39%) report at least one year of home and air security, respectively.

3 Descriptive Statistics

Table 2 presents the frequency with which firms disclose off-the-job protection for their CEO from 2006 through 2024. Panel A shows the percentage of sample firms that disclose policies for the different types of security, as well as their combinations, each fiscal year. We classify a CEO as subject to a home security policy if the firm reports home security expenses (i.e., expenses unrelated to personal travel) greater than zero, or otherwise mentions that home security is provided (Home); to a car security policy if the firm reports expenses greater than zero for driver and car, or otherwise mentions that chauffeured car service is provided (Car); and to an air security policy if the firm reports expenses greater than zero for use of company aircraft for security purposes, or otherwise mentions that company aircraft use is required, encouraged, or allowed when security concerns are present (Air). We also combine home and car security (Home & Car), home and air security (Home & Air), and car and air security (Car & Air), all three domains (All); and at least one domain of security (Any).

Across all years, at least one mode of security is present in 34.3% of firm-year observations; only 4.9% have all three. Home and air security is the most common combination, at 14.9%,

²³We use the Consumer Price Index for All Urban Consumers (CPI-U) from the Bureau of Labor Statistics, available at: <https://www.bls.gov/cpi/data.htm>.

with home and car security the least common, at 5.9%. The percentages of firms disclosing personal security are relatively stable between most years. Exceptions include the early years, during which perquisites may still have been adjusted in response to the 2006 disclosure rule changes [[Grinstein, Weinbaum and Yehuda, 2017](#)], and the final years. The percentage of firms covering home security jumped by almost 17% in fiscal year 2024, from 25.4% to 29.6%, possibly reflecting the initial response to the fatal attack on UnitedHealthcare CEO Brian Thompson. However, corporate-paid off-the-job home and air security coverage of CEOs monotonically increases beginning in 2016, suggesting growing security concerns toward the end of our sample period. The frequency with which firms protect their CEOs at home increased by over 50%, from 16.9% in 2016 to 25.4% in 2023.²⁴

Panel B of Table 2 reports the frequency with which firms change the CEO’s security coverage—adopting or terminating coverage—each year. Home security changes most frequently, with 2.8% of firms adding or dropping annually on average (about 15% firms that provide home security). Air security policies change for about 2.5% of firms each year (about 9% of firms that cover personal air travel). Panel C shows that about 75% of the policy changes occur within a CEO’s tenure, while the remaining occur around CEO turnover events. Because coverage frequency increases over time, the majority of these changes are adoptions.

Table 3 reports the top recipients of security. Panel A presents the average reported expenditures, in thousands, across all security domains (home, car, and air). Meta Platforms CEO Mark Zuckerberg tops the list, averaging over \$11 million per year, followed by the CEOs of Alphabet, Salesforce, Las Vegas Sands, Workday, Palantir Technologies, Oracle, Disney, and Amazon.com. Panel B reports the top three recipients by domain. Meta’s personal security budget for Zuckerberg dominates their peers in the home and air security domains. Alphabet’s CEO, Sundar Pichai, shows up next in home security, averaging over \$5 million per year. In comparison, Palantir’s CEO, Alexander Karp, averages over \$1.2 million in personal use of the corporate aircraft annually. The top three recipients of car security each receive over \$250,000 in

²⁴The COVID-19 pandemic in 2020 potentially affected security. In some instances, the compensation disclosures cite COVID-19 as a reason to initiate or expand the CEO’s required or recommended use of corporate aircraft for personal use. In others, use declined because of general travel limitations. The pandemic, however, did not coincide with a change in underlying disclosure rules; the SEC issued additional guidance to reinforce that personal security provided on the job need not be disclosed. Therefore, if a stay-at-home order turned an executive’s home into their workplace, a home security system set up subsequently is classified as on-the-job protection (see issue 219.05 in the SEC’s Compliance and Disclosure Interpretations to Regulation S-K: [C&DI Regulation S-K](#)).

chauffeured car service (mostly commuting); two of the firms are headquartered in Manhattan.

Panel A of Table 4 reports security observation counts by domain, whether the firm reported no cost (true zero), whether it disclosed the existence but not the amount (following the bright-line threshold rules described earlier), and those disclosing the amounts. Approximately two-thirds of the disclosed home security policies provide amounts (including 64 firm-years in which the net cost to the company was zero). In contrast, almost 97% of disclosed air security policies do. Air security has the highest concentration of zero-reported expenses at 10.6% (295/2,791), largely due to non-use. Among observations with positive disclosed amounts, the median home security cost is just 0.3% of total compensation (13.1% of other), while the median air security cost runs 0.8% of total compensation (35.5% of other). In both cases, the implied value of these security measures, relative to the total compensation package, appears small for most CEOs.

Panel B provides descriptive statistics for variables used in the analyses. any_sec_{ijt} indicates whether home, car, or air security is present. $home_sec_{ijt}$ and air_sec_{ijt} indicate the presence of home or air, respectively. sec_exp_{ijt} , $home_sec_exp_{ijt}$, and $air_sec_exp_{ijt}$ are the annual dollar amounts (in thousands) for all, home, and air security, respectively, for all firm-years of those firms with at least one year of security in the respective category. If security spending is disclosed in a year but the amount is not reported, we estimate the expense amount at 10% of all other compensation. The average total security expenditures (inclusive of years with no spending) is over \$135 thousand, with average spending of \$69 thousand for home security and \$91 thousand for air security.

The average CEO chairs the board roughly half the time, has been in office over seven years, and is a member of the founding family in nearly 12% of observations. The average CEO has almost 8 edits to their Wikipedia page in the prior year and over 44,000 page views annually. The median for both measures is zero, as nearly 70% of CEOs in our sample do not have a Wikipedia page (84% at the beginning of our sample and 65% at the end). The firm announces a layoff-related event in about 12% of firm-years, and we categorize about 60% of those (0.073 / 0.121) as severe based on contemporaneous large negative news sentiment from RavenPack. The correlations reported in Panel C suggest that our visibility proxy based on Wikipedia edits is strongly correlated with proxies for decision authority.

4 Empirical Strategy and Results

4.1 Main Model

To assess the sensitivity of the CEO’s security to their decision authority and visibility, we analyze the board’s decision at both the extensive margins (whether to protect the CEO off the job) and intensive margins (how much to spend). To do so, we estimate variations of the following empirical model:

$$\begin{aligned}
 PS_{ijt} = & \beta_0 + \beta_1 ceo_chair_{i(t-1)} + \beta_2 \ln(tenure)_{ijt} + \beta_3 founder_{ij} \\
 & + \beta_4 \ln(wiki_edits)_{ij(t-1)} + \beta_5 \ln(assets)_{i(t-1)} + \beta_6 market_book_{i(t-1)} \\
 & + \beta_7 rd_intensity_{i(t-1)} + \beta_8 sd(return)_{i(t-1)} + \beta_9 \ln(board_size)_{i(t-1)} \\
 & + \beta_{10} independence_{i(t-1)} + \beta_{11} other_boards_{i(t-1)} \\
 & + \theta_C Controls_{i(t-1)} + FE + \epsilon_{ijt}
 \end{aligned} \tag{1}$$

where i denotes firm, j CEO spell, and t fiscal year. PS_{ijt} is the outcome of the decision to protect the CEO or the amount of security expenses. For the decision to protect the CEO, we use an indicator variable equal to one if the firm reports home security [$home_sec_{ijt}$], air security [air_sec_{ijt}], or any type of security policy (i.e., home, car, or air security) [any_sec_{ijt}]. For the decision on how much to spend, we focus on firms that have security at some point during the sample period, and use the log of one plus the reported security expense in the regression.

The first four variables are proxies for decision authority and visibility. Our main proxies for decision authority reflect attributes of the CEO consistent with substantial decision rights. CEOs are ultimately responsible for their firms’ actions, but differ in the extent to which they delegate decision-making or influence board controls. Our proxies include $ceo_chair_{i(t-1)}$, an indicator variable equal to 1 if the CEO is the chair of the board [Brickley, Coles and Jarrell, 1997]. To measure CEO experience and expertise, we use $\ln(tenure)_{ijt}$, the natural logarithm of the number of years the CEO has been in office [Graham et al., 2015]. Finally, $founder_{ij}$ is an indicator variable for a CEO who either founded the firm or belongs to the founding family [Adams et al., 2005]. Our primary proxy for CEO visibility is based on social attention using annual statistics from the CEO’s Wikipedia page: annual edits and views [Lovelace et al., 2022]. We use $\ln(wiki_edits)_{ij(t-1)}$ in the main specification, given its availability over the

entire sample period. We predict positive coefficients on the first four variables.²⁵

The remaining variables include controls for a range of firm-level attributes. $\ln(\text{assets})_{i(t-1)}$ is based on balance sheet assets and controls for the effect of firm size, which is correlated with decision authority, CEO wealth, and firm visibility. $\text{market_book}_{i(t-1)}$, the market-to-book asset ratio, controls for investment opportunities and their influence on delegation. $rd_intensity_{i(t-1)}$, R&D expenses divided by sales, and $sd(return)_{i(t-1)}$, the standard deviation of monthly returns, control for the influence of innovation on both the decentralization of decision authority and the value of private information [Acemoglu, Aghion, Lelarge, Van Reenen and Zilibotti, 2007; Bloom, Sadun and Van Reenen, 2010; Li et al., 2014; Marino and Matsusaka, 2005]. Protecting the value of proprietary information is a key function of corporate security; the CEO may face greater risk from espionage, or lesser risk given that the details of the technologies are held at lower levels of the organization.²⁶ Our regressions also control for leverage, sales growth, and accounting and stock market returns [$Controls_{i(t-1)}$].

The board of directors is responsible for determining the need and approving the budget for the CEO’s off-the-job security. Moreover, while the board cannot direct security resources to provide literal surveillance, security coverage offers two potential channels for monitoring the CEO’s off-the-job behavior: ex ante intervention²⁷ and ex post reporting.²⁸ We control

²⁵Other determinants of the CEO’s risk profile can include marital status, number and ages of children at home, personal habits, medical issues, hobbies, and the locations of primary and vacation residences. To the extent public knowledge of these attributes affects the CEO’s risk exposure, the security team will actively work to scrub this information from the public domain. This introduces a selection bias, as CEOs with high security risk are more likely to be treated by the researcher as having missing values for personal risk factors. We acknowledge that our inferences could be affected by excluding these important, but often unobservable, variables.

²⁶An important caveat regarding firm attributes is that we cannot sign the predictions. Take size as an example. While the average CEO of a large firm is more likely to decentralize decision-making to reduce personal risk, the scale of the firm magnifies the impact of those decisions, increasing risk. Moreover, the large-firm CEO is more visible (because of the firm’s prominence) and more wealthy (given the well-established link between firm size and compensation as in Baker and Hall [2004]). Similarly, an innovative firm in a dynamic industry is more likely to decentralize authority, thereby reducing the demand for CEO protection. But information about the innovation is also valuable to outsiders. This could imply that companies are more likely to secure the CEO to protect that information, or less likely if the CEO lacks the technical knowledge that malicious actors seek. We report the coefficients for the primary controls but interpret their effects descriptively.

²⁷Security personnel can intervene on behalf of the firm if not doing so would trigger a public relations crisis, market value losses, a loss of trust in the CEO and/or products, or questions about the board’s competency in addressing inappropriate behavior [Lin, 2020].

²⁸As employees of the company (in most circumstances), security personnel are expected to report CEO actions that violate the company’s code of conduct through the appropriate corporate channels. It is difficult to test this monitoring hypothesis because it is unlikely to be a first-order consideration and requires an (ex-ante) proxy for the CEO’s propensity to engage in misconduct off the job, which is difficult to identify. Candidate metrics for personality traits (e.g., narcissism) have been empirically operationalized in prior literature using proxies such as the size of the CEO’s signature and photo [e.g., Chatterjee and Hambrick, 2007; Ham, Seybert and Wang, 2018], but are noisy and require strong assumptions about their links to underlying personality traits.

for monitoring-driven influence over security policies with $\ln(\text{board_size})_{i(t-1)}$, the natural logarithm of the number of directors, $\text{independence}_{i(t-1)}$, the share of independent directors, and $\text{other_boards}_{i(t-1)}$, the average number of boards directors serve on. However, we avoid strong interpretations of the results, given that board attributes can reflect the strength of monitoring, the optimal centralization of decision authority with the CEO, the demand and impact of knowledge from outside the firm, and advisory demands, among other things.

We include fiscal-year and state fixed effects to account for general trends over time and across regions, as well as either firm- or industry-level fixed effects. Industry fixed effects address (some) industry-wide risks, such as threats related to the type of business (e.g., fossil fuel or animal cruelty). Firm fixed effects address firm-specific risks (e.g., political visibility due to a history of misconduct or crime risk depending on a firm's operational location choices), but they are also likely to absorb some of the variation we are interested in (e.g., firm-specific factors that determine the organizational structure but change slowly over time). In making inferences, firm effects are appropriate if boards benchmark the demands for security against the firm's prior years. In contrast, industry effects are more appropriate if boards benchmark the demands against other firms in the industry. While we expect most of the variation in security demands to arise across firms, it is plausible that both sources of identification are relevant, so we report results for both. Industry fixed effects follow the Fama and French 48-industries classification. Standard errors are clustered by firm throughout.

4.2 The Decision to Protect the CEO

Panel A of Table 5 focuses on the extensive margin: the decision to provide security. We report results by domain (any, home, and air) and the source of variation used to identify the effects (across-firm versus within-firm). We find evidence consistent with boards factoring in the CEO's decision authority in determining security policies. Across firms, a CEO who chairs the board is significantly more likely to be covered by home (coeff. = 0.105, $p < 0.01$) and air (coeff. = 0.091, $p < 0.01$) security. Relative to the unconditional probabilities (0.193 for home security and 0.271 for air security), this translates into a 54% and 34% increase in the likelihood of home and air security, respectively. Within the firm, a chair appointment continues to predict a statistically significant change in home security (coeff. = 0.044, $p < 0.01$) and air security (coeff. = 0.038, $p < 0.01$). Moreover, time on the job appears important. The coefficient on $\ln(\text{tenure})_{ijt}$ of 0.013 ($p < 0.01$) in the home security model implies that increasing the CEO's

tenure from the median to third quartile (from approximately six to ten years) is associated with a 0.007 higher probability of home security ($0.013 \times \ln(10/6)$). The effect is smaller but still marginally significant for air security (coeff. = 0.008, $p < 0.10$). The coefficient on founder is largely insignificant, with an important exception: within-firm variation in home security. The estimated coefficient of -0.080 ($p < 0.05$) implies that CEOs who replace founders (the norm) are more likely to receive security.²⁹

We also find evidence that CEO visibility matters. Wikipedia page edits, our proxy for secular popularity, enters as a strong predictor of home and air security coverage. Across firms, the coefficient on $\ln(wiki_edits)_{ij(t-1)}$ of 0.055 ($p < 0.01$) in the home security model implies that increasing edit activity from the median to the third quartile is associated with a sizable 50.3 percentage point increase in the probability of coverage ($0.055 \times (9.150-0)$).³⁰ Because many CEOs in our sample lack Wikipedia pages, identification comes from both variation in the existence of a page (required to make any edit) and edits to that page. Using within-firm variation, the coefficient is identified only among firms in which a CEO has a page at least once. In this specification, the estimated coefficient on $\ln(wiki_edits)_{ij(t-1)}$ is smaller at 0.013, but still marginally significant ($p < 0.10$). In other words, high-visibility CEOs (who have a Wikipedia page and generate enough public attention for their page to be edited) are more likely to receive security. While not exclusively a visibility proxy, security is reliably more likely in larger firms. Outside of firm size, however, firm characteristics do not consistently explain variation in CEO security.

4.3 The Amount Spent on Protecting the CEO

Next, we turn to the intensive margin by examining the sensitivity of expenditures on CEO security to variation in their decision authority and visibility. In the estimation, we use only firms that report security expenses greater than zero in at least one year and include all years for each firm in the analysis, given our interest in security budget decisions within firms that reveal a preference to protect the CEO. The sample for total security expenses comprises 345 firms,

²⁹As an example, at Netflix, founder Reed Hastings received no disclosed home security during his tenure as CEO, although his successor Theodore Sarandos did. Google/Alphabet founder Larry Page served as CEO from 2011 through 2018, with no disclosed home security coverage. He was preceded by Eric Schmidt and succeeded by Sundar Pichai, both of whom received significant security coverage.

³⁰We estimate visibility effects using the distributions of the logged values from Panel B of Table 4

while the samples for home and air security expenses are 237 and 261 firms, respectively.³¹

Panel B of Table 5 presents the results of the regression analyses, reported by domain (any, home, and air) and variation used for identification (across- and within-firm). CEO decision authority and visibility appear to be strong determinants of spending levels, both across and within firms. Across firms, the CEO who also chairs the board receives a 66.7% larger home security budget ($p < 0.01$), and a roughly 40.0% larger air security budget ($p < 0.05$). For home security, the coefficient on $\ln(\text{tenure})_{ijt}$ in the third column of 0.174 ($p < 0.01$) implies that a CEO at the third quartile of tenure in office has a 9% larger security budget than a CEO at the median ($0.174 \times \ln(10/6)$). The coefficient increases to 0.208 ($p < 0.01$) within the firm. The sensitivity of air security spending to CEO tenure is larger, but neither home nor air security alone appears to be sensitive to the CEO's (or family member's) status as a founder. That said, total security spending in the first column does appear larger for the founder-CEO in the cross-section (coeff. = 0.576, $p < 0.10$).

Again, CEO visibility appears to play a role in the variation in security spending. For home security, the coefficient on $\ln(\text{wiki_edits})_{ij(t-1)}$ estimated across firms is 0.323 ($p < 0.01$), while for air security, the coefficient is 0.123 ($p < 0.10$). However, both home and air security spending appear similarly sensitive to changes in CEO visibility within the firm, with coefficient estimates of 0.179 and 0.183, respectively ($p < 0.01$ for both). Firm size also explains security spending, with spending responding strongest to within-firm (versus across-firm) growth in assets (e.g., coefficients of 0.541 versus 0.179 for home security, and 0.550 versus 0.317 for air security).

Aside from firm size, we again find little reliable evidence that firm characteristics and board attributes explain security. Market-to-book has a consistent positive association with security policies and spending, but the effects are marginal at best. The sign on R&D is inconsistent, although a significant positive coefficient arises in the model estimating within-firm variation in home security spending (coeff. = 5.607, $p < 0.05$) in Panel B. We do find that busy directors ($\text{other_boards}_{i(t-1)}$) are associated with more air security coverage in both models. While this could be attributed to a weak governance explanation, conversations with security consultants

³¹One could expect more pronounced effects on home security, not only because residential protection is a stronger signal but also because its scope is more likely to be under the board's control. Whether to cover the CEO's residence and the amount spent on it are, plausibly, decisions largely driven by the security team's (time-varying) assessment of the extent of protection required. While the same applies to the decision to protect the CEO's personal travel, the amount spent on travel security is likely determined by the CEO's personal travel decisions, including the decision to travel to riskier destinations. In that light, travel security expenses may capture in part the extent and nature of the CEO's vacation time.

also suggested that directors are often introduced to the need for CEO security through fellow directors' experiences on other boards. In the end, it is largely the authority and visibility of the CEO, rather than the attributes of the firm they manage, that appear to dictate the firm's protection policies.

4.4 Evidence from Workforce Reductions

In this section, we examine the security consequences of controversial managerial decisions around a specific expression of decision-making with negative sentiment: workforce reductions. As discussed earlier, layoffs are a compelling empirical setting given their natural occurrence in firms' business cycles, their transitory nature, their unambiguous link to individual grievances and managerial threats, their explicit reference in security disclosures, and the CEO's aversion to doing them [Bertrand and Mullainathan, 2003; Guenzel et al., 2025; Keum and Liu, 2025; Landier et al., 2007; Yonker, 2017].

Following Guenzel et al. [2025], we first identify layoff-related announcements from the Capital IQ Key Developments database, using the following categories: "Discontinued Operations / Downsizings," "Business Reorganizations," and "Labor-Related Announcements". For each announcement, we use RavenPack to identify contemporaneous news sentiment for the 7-day period centered on the announcement date, and retain only layoff announcements with a negative average daily sentiment over this period. We use these filters to create an indicator variable, $layoff_{it}$, equal to 1 if the firm announced a negative layoff event with negative news sentiment during the year. To focus on severe layoff events, we also create a second indicator variable, $major_layoff_{it}$, that requires the announcement to have below median negative sentiment scores. The regressions also include lead and lag (e.g., $layoff_{i(t+1)}$ and $layoff_{i(t-1)}$) indicators to capture anticipatory and residual security responses surrounding the announcement.

We report the results in Table 6. Panel A focuses on normal layoff announcements. Across firms, the decision to provide security appears to precede layoff announcements (security responds to announcements in year $t+1$), with the strongest responses for home (coeff. = 0.037, $p < 0.05$) and air (coeff. = 0.034, $p < 0.05$) security. The increased likelihood of home security in these firms persists into the current and future years at marginally significant levels ($p < 0.10$ or 0.05), while air security remains positive but is insignificant. When we narrow the events to major layoff announcements in Panel B, the security response is more robust, predicting a 0.039 to 0.063 higher likelihood of home security relative to other firms in the years surrounding the

event ($p < 0.01$ or 0.05), and 0.032 to 0.045 higher likelihood of air security ($p < 0.10$ or 0.01). When we focus on within-firm dynamics, layoffs are marginally significantly associated with a higher likelihood of adopting home security in advance of a major layoff (coeff. = 0.032 , $p < 0.05$). Air security responses to layoffs are always weaker than those for home security across firms and are completely absent within the firm.³²

The finding that security responds to layoffs is consistent with greater security needs around a known workforce reduction and the board using security to reduce the CEO's aversion to making difficult organizational decisions (e.g., to address "quiet life" incentives as in [Bertrand and Mullainathan \[2003\]](#)). In both cases, security arises because the CEO is expected to make a decision that affects their personal safety. The findings also counter the view that security is a discretionary perk. If security is discretionary, then we should expect the board to reduce security coverage around layoff events, not increase it as we document.

In Table [OA.1](#) of the Online Appendix, we also report results that explain variation in the amount spent on security. With the exception of an increase in air security spending (personal air travel) in the year ahead of major layoffs, we find no measurable changes in spending levels. Taken together with the results in Table [6](#), this implies that security responses to workforce reductions occur largely on the extensive margin, through transitory coverage.

5 Additional Analyses

5.1 CEO Visibility

Our primary test of CEO visibility in Table [5](#) relies on edits to their personal Wikipedia pages. In this section, we consider alternatives based on CEO and firm coverage in the Wall Street Journal and CEO Wikipedia page views. Panel A of Table [7](#) reports results for the subsample of firm-years we can match to RavenPack data. Across firms, we find that WSJ coverage of the firm is associated with a higher likelihood of home (coeff. = 0.039 , $p < 0.01$) and air security (coeff. = 0.040 , $p < 0.01$). In contrast, WSJ coverage of the CEO is associated with a lower likelihood of air security (coeff. = -0.092 , $p < 0.01$). We find no evidence that within-firm

³²Three plausible interpretations for this arise. The first is optics. Executives and directors are more sensitive to the CEO's use of the corporate aircraft for personal travel when rank-and-file employees are making sacrifices. The second is the domain of the risk. The threat of retribution is most likely to affect the CEO locally, not while on vacation. The third is discretionary time. Reorganizations demand the CEO's time and focus, and CEOs are less likely to go on vacation when the firm is under-performing [[Yermack, 2014](#)].

changes in WSJ coverage are associated with security. In Panel B, we focus on the subset of firm-years with CEO Wikipedia page views. Even over this shorter period, we find that page views are also a reliable predictor of security, particularly in the home security domain. Across firms, views are associated with a higher likelihood of both home (coeff. = 0.015, $p < 0.01$) and air security (coeff. = 0.011, $p < 0.01$). Within the firm, an increase in page views predicts an increase in home security (coeff. = 0.006, $p < 0.05$).

Panel A of Table [OA.2](#) reports the results on variation in spending in response to WSJ coverage. There is no evidence that CEO security spending responds to firm articles. However, across firms, there is some evidence that a CEO with more articles spends more on home security (coeff. = 0.273, $p < 0.10$) and less on air security (coeff. = -0.336, $p < 0.05$). Wikipedia views (Panel B) predict increases in home (but not air) security, both across and within firms. Taken together, the results are largely consistent with security — home security in particular — responding to CEO visibility, with the strongest results based on a measure of secular prominence reflected in online attention (Wikipedia).

5.2 Reputation and Controversial Business Practices

In this section, we assess the degree to which controversial business policies, such as environmental practices and executive compensation, influence corporate executive protection policies. Panel A of Table [8](#) focuses on exposure to environmental, safety, and governance (ESG) risk (using the "RepRisk Index" from RepRisk) and to securities law violations using undisclosed SEC investigations from [Blackburne et al. \[2021\]](#). We find that CEOs of firms with higher RepRisk Index values are more likely to have both home and air security, and that they are more likely to adopt air security as the firm's ESG risk increases. For example, based on the estimated coefficients on $esg_risk_{i(t-1)}$ of 0.43 and 0.41 in the third and fifth columns ($p < 0.01$ for both), a firm with a 0.083 higher RepRisk Index value (from the median to the third quartile) is about 0.035 more likely to have home or air security. Firm effects appear to account for most of the variation in ESG effects, with only air security remaining marginally sensitive to ESG risk within firms. We find no connection between corporate executive protection and securities law investigations.

High CEO compensation is frequently a target of the business press, activist investors, and labor groups, rendering it a potentially controversial practice that attracts personal risk. To measure excess compensation, $res(comp)_{ij(t-1)}$, we rely on [Core, Guay and Larcker \[2008\]](#) and

adjust the dependent variable in their model, total compensation, to exclude security expenses. To measure the gap between the CEO and other top executive pay, $pay_gap_{ij(t-1)}$, we rely on prior work in [Bognanno \[2001\]](#), [Henderson and Fredrickson \[2001\]](#), and [Kale, Reis and Venkateswaran \[2009\]](#) and use the log difference between CEO compensation and the median of the remaining top executives. We adjust CEO compensation amounts to exclude security expenses. Since we do not have data on security for executives other than the CEO, pay gaps are based on total compensation less other compensation (shrinking the measured gap). An important caveat of these tests is that excess compensation and pay gap can also proxy for the relative value of the CEO and their authority, affecting our interpretations. In Panel B of Table 8, we find no evidence that excess compensation is associated with security, but some evidence that firms with large gaps between the CEO's and other executives' compensation predict a higher likelihood of home (coeff. = 0.032, $p < 0.10$) and air (coeff. = 0.065, $p < 0.01$) security. CEO ownership (as a percentage of shares outstanding) appears unrelated to protection.

In Table [OA.3](#) of the Online Appendix, we examine how spending varies with reputation risk factors. The coefficients are insignificant, suggesting that variation in ESG risk index values predicts variation in policies at the extensive margin (Panel A of Table 8), but not variation on the intensive margin (Panel A of Table [OA.3](#)). We do find some evidence that excess compensation predicts security spending across firms, with excess compensation predicting more spending on home security and the pay gap predicting more spending on air security (Panel B).

In Table [OA.4](#), we also consider whether security policies are more likely in certain controversial industries by reporting the industry fixed effects from our main model. While we find no consistent evidence that security policies cluster in specific industries (Panel A), we do find that, conditional on using security during the sample, spending on both home and air security is significantly higher in mining and energy industries (Panel B).

5.3 Car Security

Providing a security-trained driver and a corporate vehicle for commuting is less common than home or air security, but it remains a key domain of corporate executive protection. In Table 9, we report results on car security using the same specification as Table 5. We continue to find that decision authority and visibility predict car security. Chairing the board and Wikipedia edits predict the adoption of car security, both across firms and within firms. For example, a CEO-Chair is 0.039 more likely to have car security than non-Chair CEOs ($p < 0.05$), a 32.5%

increase over the sample average likelihood of 0.120 (Panel A of Table 2). Edits to the CEO’s Wikipedia page also predict growth in spending on car security as Wikipedia edits increase (coeff. = 0.182, $p < 0.01$), implying the need to increase security budgets as CEO visibility expands.

6 Conclusion

Using publicly available time-series data on corporate-funded personal security provided to S&P 500 CEOs, we examine the reasons boards adopt policies to protect CEOs on their personal time. In their most extensive form, personal security policies include mandatory use of the corporate aircraft for personal travel, residential security systems with on-site personnel, personal protection on vacations, and commuting in an armored vehicle driven by a security-trained and armed driver. Over our entire sample period from the end of 2006 through mid-2025, nearly 20% of firms disclose home security and 27% disclose air security, with those figures approaching 30% and 37%, respectively, in the last year of the sample.

We predict that boards are more likely to provide security to CEOs who have more decision authority within the firm, greater public visibility, and who are implementing workforce reductions. Examining security on both the extensive and intensive margins and using both across-firm and within-firm variation, company-funded off-the-job security is more comprehensive for CEOs who chair the board, have been on the job longer, are more visible, and lead the company through severe layoffs. Other than firm size, standard firm characteristics such as innovation, profitability, and return volatility do not consistently explain CEO protection policies. Moreover, the board’s attributes do not explain security, suggesting no clear link between monitoring demands and CEO protection. That said, security is more likely when the CEO leads a high-ESG-risk firm (consistent with these leaders attracting public attention from activist organizations such as Climate Defiance).

Collectively, and consistent with anecdotal statements in executive compensation disclosures, boards implement personal security policies to manage and mitigate risk arising from the CEO’s position within the firm (decision authority) and outside the firm (visibility). By studying the board’s response to a novel risk faced by top executives, our evidence should encourage a more extensive consideration of non-financial risks and their contribution to the design of incentive contracts, the assignment of decision rights within the firm, and the incentives for CEO visibility.

Appendix

A.1 Variable Definitions

Variable	Description
PERSONAL SECURITY	
any_sec_{ijt}	Indicator variable equal to one if the firm reports home, car, or air personal security (as defined by $home_sec_{ijt}$, car_sec_{ijt} , and air_sec_{ijt} , respectively).
$home_sec_{ijt}$	Indicator variable equal to one if the firm reports home personal security expenses (i.e., expenses unrelated to personal travel) greater than zero, or otherwise mentions that home security is provided.
car_sec_{ijt}	Indicator variable equal to one if the firm reports expenses greater than zero for driver and car, or otherwise mentions that driver and car are provided for personal transportation.
air_sec_{ijt}	Indicator variable equal to one if the firm reports expenses greater than zero for use of company aircraft for security purposes, or otherwise mentions that company aircraft use is required, encouraged, or allowed when security concerns are present.
$\ln(sec_exp)_{ijt}$	Natural logarithm of one plus total personal security expenses, i.e., the sum of home, car, and air security expenses [$\ln(home_sec_exp)_{ijt}$, $\ln(car_sec_exp)_{ijt}$, and $\ln(air_sec_exp)_{ijt}$, respectively].
$\ln(home_sec_exp)_{ijt}$	Natural logarithm of one plus home personal security expenses. For home security that is identified but not quantified, we use 10% of other compensation. In thousands and 2020 dollars.
$\ln(car_sec_exp)_{ijt}$	Natural logarithm of one plus expenses for driver and car. For car security that is identified but not quantified, we use 10% of other compensation. In thousands and 2020 dollars.
$\ln(air_sec_exp)_{ijt}$	Natural logarithm of one plus expenses for use of the company aircraft for security purposes. For air security that is identified but not quantified, we use 10% of other compensation. In thousands and 2020 dollars.
CEO	
$ceo_chair_{i(t-1)}$	Indicator variable equal to one if the CEO is the chair of the board.
$\ln(tenure)_{ijt}$	Natural logarithm of the number of years the CEO has been in office. If available, we use the date the CEO assumed office (<i>BECAMECEO</i> in ExecuComp); if unavailable, we derive it from the CEO's first appearance in ExecuComp.
$founder_{ij}$	Indicator variable equal to one if the CEO is the founder of the company or a member of the founding family.
$\ln(wiki_edits)_{ij(t-1)}$	Natural logarithm of one plus the number of page edits to the CEO's Wikipedia page. We set the variable equal to zero if the CEO does not have a Wikipedia page. Years are defined in calendar time.
$\ln(wsj_ceo)_{ij(t-1)}$	Natural logarithm of one plus the number of articles in the Wall Street Journal related to the CEO during the fiscal year.
$\ln(wiki_views)_{ij(t-1)}$	Natural logarithm of one plus the number of page views on the CEO's Wikipedia page. We set the variable equal to zero if the CEO does not have a Wikipedia page. Years are defined in calendar time.

Continued on next page

Variable	Description
$res(comp)_{ij(t-1)}$	The residual from a regression of the natural logarithm of CEO compensation on determinants of compensation following Core et al. [2008] . Compensation corresponds to total compensation less personal security expenses.
$pay_gap_{ij(t-1)}$	Natural logarithm of the difference between the compensation of the CEO and the median compensation of the next four highest-paid executives, where compensation corresponds to total compensation less other compensation.
$ownership_{ij(t-1)}$	Percentage of company stock held by the CEO, computed as shares owned (excluding options) divided by the number of shares outstanding.
FIRM	
$ln(assets)_{i(t-1)}$	Natural logarithm of total assets. In millions and 2020 dollars.
$market_book_{i(t-1)}$	Market value of total assets (market value of equity plus book value of liabilities) divided by book value of assets.
$rd_intensity_{i(t-1)}$	R&D expenses divided by sales. If we include $rd_intensity_{i(t-1)}$ in a model, we also include an indicator variable that is equal to one if R&D expenses are missing but do not tabulate it.
$sd(return)_{i(t-1)}$	Standard deviation of monthly returns over the preceding 12 months.
$ln(board_size)_{i(t-1)}$	Natural logarithm of the number of directors.
$independence_{i(t-1)}$	Share of directors that are classified as independent.
$other_boards_{i(t-1)}$	The average number of boards on which directors serve.
$return_{i(t-1)}$	Stock return over the preceding 12 months.
$sales_growth_{i(t-1)}$	Change in sales from the previous year, expressed as a fraction.
$roa_{i(t-1)}$	Return on assets, computed as income before extraordinary items divided by lagged total assets.
$lev_{i(t-1)}$	The sum of debt in current liabilities and long-term debt divided by total assets.
$layoff_{it}$	Indicator variable equal to one if the firm announces at least one layoff or similar event with negative news sentiment in the seven-day period centered on the announcement date during the fiscal year.
$major_layoff_{it}$	Indicator variable equal to one if the firm announces at least one layoff or similar event with below-median negative news sentiment in the seven-day period centered on the announcement date during the fiscal year.
$ln(wsj_firm)_{i(t-1)}$	Natural logarithm of one plus the number of articles in the Wall Street Journal related to the firm during the fiscal year.
$esg_risk_{i(t-1)}$	Risk exposure to ESG issues, computed as the average of the daily values of the RepRisk Index (RRI) throughout the firm's fiscal year. Rescaled to lie between zero and one.
$sec_inv_{i(t-1)}$	Indicator variable equal to one if the firm is subject to at least one opened, closed, or ongoing SEC investigation. We use the data on investigations closed until 2017 from Blackburne et al. [2021] . We set the variable to zero for all observations for which no investigation(s) are reported until and including 2017.

Notes: i denotes firm, j CEO spell, and t fiscal year. To define fiscal years, we assign fiscal years ending in January through May to the previous calendar year and fiscal years ending in June through December to the calendar year in which they end. We winsorize continuous variables at the 1st and 99th percentiles.

References

- Acemoglu, D., Aghion, P., Lelarge, C., Van Reenen, J. and Zilibotti, F. [2007], ‘Technology, information, and the decentralization of the firm’, *The Quarterly Journal of Economics* **122**(4), 1759–1799.
- Adams, R. B., Almeida, H. and Ferreira, D. [2005], ‘Powerful CEOs and their impact on corporate performance’, *The Review of Financial Studies* **18**(4), 1403–1432.
- Admati, A. R., Atkinson, N. and Pfleiderer, P. [2025], ‘Profitable misconduct, corporate governance, and law enforcement’, *Working Paper*.
- Aghion, P. and Tirole, J. [1997], ‘Formal and real authority in organizations’, *Journal of Political Economy* **105**(1), 1–29.
- Armstrong, C. S., Glaeser, S. A. and Huang, S. [2022], ‘Contracting with controllable risk’, *Accounting Review* **97**(4), 27–50.
- Baiman, S., Larcker, D. F. and Rajan, M. V. [1995], ‘Organizational design for business units’, *Journal of Accounting Research* **33**(2), 205–229.
- Baker, G., Gibbons, R. and Murphy, K. [1999], ‘Informal authority in organizations’, *The Journal of Law, Economics, and Organization* **15**(1), 56–73.
- Baker, G. P. and Hall, B. J. [2004], ‘CEO incentives and firm size’, *Journal of Labor Economics* **22**(4), 767–798.
- Bassanini, A., Caroli, E., Geay, K. and Reberioux, A. [2024], ‘Heavy is the crown: CEOs’ social interactions and layoff decisions’, *Industrial and Corporate Change* **33**(5), 1253–1270.
- Bennedsen, M., Pérez-González, F. and Wolfenzon, D. [2020], ‘Do CEOs matter? Evidence from hospitalization events’, *The Journal of Finance* **75**(4), 1877–1911.
- Bertrand, M. and Mullainathan, S. [2003], ‘Enjoying the quiet life? Corporate governance and managerial preferences’, *Journal of Political Economy* **111**(5), 1043–1075.
- Blackburne, T., Kepler, J. D., Quinn, P. J. and Taylor, D. [2021], ‘Undisclosed SEC investigations’, *Management Science* **67**(6), 3403–3418.
- Blankespoor, E. and deHaan, E. [2020], ‘Strategic disclosure and CEO media visibility’, *Journal of Financial Reporting* **5**(1), 25–50.
- Bloom, N., Sadun, R. and Van Reenen, J. [2010], ‘Does product market competition lead firms to decentralize?’, *American Economic Review: Papers & Proceedings* **100**(2), 434–438.
- Bognanno, M. L. [2001], ‘Corporate tournaments’, *Journal of Labor Economics* **19**(2), 290–315.
- Brickley, J. A., Coles, J. L. and Jarrell, G. [1997], ‘Leadership structure: Separating the CEO and Chairman of the Board’, *Journal of Corporate Finance* **3**(3), 189–220.
- Brochet, F., Chychyla, R. and Ferri, F. [2024], ‘Virtual shareholder meetings’, *Management Science* **70**(9), 5896–5930.
- Byman, D. [2025], ‘Foreign malign influence targeting U.S. and allied corporations’, *CSIS Briefs*.
- URL:** <https://www.csis.org/analysis/foreign-malign-influence-targeting-us-and-allied-corporations>

- Call, A. C., Emett, S. A., Maksymov, E. and Sharp, N. Y. [2022], ‘Meet the press: Survey evidence on financial journalists as information intermediaries’, *Journal of Accounting and Economics* **73**(2-3).
- Carlock, A. and Cutler, M. [2023], Mass attacks in public spaces: 2016-2020, Technical report, National Threat Assessment Center, U.S. Secret Service.
- Chatterjee, A. and Hambrick, D. C. [2007], ‘It’s all about me: Narcissistic chief executive officers and their effects on company strategy and performance’, *Administrative Science Quarterly* **52**(3), 351–386.
- Chatterjee, A. and Pollock, T. G. [2017], ‘Master of puppets: How narcissistic CEOs construct their professional worlds’, *Academy of Management Review* **42**(4), 703–725.
- Coles, J. L., Daniel, N. D. and Naveen, L. [2006], ‘Managerial incentives and risk-taking’, *Journal of Financial Economics* **79**(2), 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), 1–25.
- Dai, Y., Rau, P., Stouraitis, A. and Tan, W. [2020], ‘An ill wind? Terrorist attacks and CEO compensation’, *Journal of Financial Economics* **135**(2), 379–398.
- Diplomatic Security Service [2024], OSAC benchmarking report - Executive protection threats and mitigation, Technical report, U.S. Department of State.
- Fama, E. F. and Jensen, M. C. [1983], ‘Separation of ownership and control’, *The Journal of Law and Economics* **26**(2), 301–325.
- Graham, J. R., Harvey, C. R. and Puri, M. [2015], ‘Capital allocation and delegation of decision-making authority within firms’, *Journal of Financial Economics* **115**(3), 449–470.
- Grinstein, Y., Weinbaum, D. and Yehuda, N. [2017], ‘The economic consequences of perk disclosure’, *Contemporary Accounting Research* **34**(4), 1812–1842.
- Guenzel, M., Hamilton, C. and Malmendier, U. [2025], ‘CEO prosociality and layoffs’, *Working Paper*.
- Ham, C., Seybert, N. and Wang, S. [2018], ‘Narcissism is a bad sign: CEO signature size, investment, and performance’, *Review of Accounting Studies* **23**(1), 234–264.
- Harris, M. and Raviv, A. [2005], ‘Allocation of decision-making authority’, *Review of Finance* **9**(3), 353–383.
- Hayward, M. L., Rindova, V. P. and Pollock, T. G. [2004], ‘Believing one’s own press: The causes and consequences of CEO celebrity’, *Strategic Management Journal* **25**(7), 637–653.
- Henderson, A. D. and Fredrickson, J. W. [2001], ‘Top management team coordination needs and the ceo pay gap: A competitive test of economic and behavioral views’, *Academy of Management Journal* **44**(1), 96–117.
- Jenter, D., Matveyev, E. and Roth, L. [2024], ‘Good and bad CEOs’, *Working Paper*.
- Kale, J. R., Reis, E. and Venkateswaran, A. [2009], ‘Rank-order tournaments and incentive alignment: The effect on firm performance’, *Journal of Finance* **64**(3), 1479–1512.
- Keum, D. D. and Liu, X. L. [2025], ‘Managerial prosocial preferences and guilt as an emotional barrier to exit decisions’, *Management Science*.

- Lambert, R. A. and Larcker, D. F. [1985], ‘Golden parachutes, executive decision-making, and shareholder wealth’, *Journal of Accounting and Economics* **7**(1), 179–203.
- Landier, A., Nair, V. B. and Julie Wulf [2007], ‘Trade-offs in staying close: Corporate decision making and geographic dispersion’, *The Review of Financial Studies* **22**(3), 1119–1148.
- Lee, L. F., Lowry, M. and Shu, S. [2018], ‘Are all perks solely perks? Evidence from corporate jets’, *Journal of Corporate Finance* **48**(February), 460–473.
- Li, F., Minnis, M., Nagar, V. and Rajan, M. [2014], ‘Knowledge, compensation, and firm value: An empirical analysis of firm communication’, *Journal of Accounting and Economics* **58**(1), 96–116.
- Lin, T. C. W. [2020], ‘Executive private misconduct’, *George Washington Law Review* **88**(2), 327–391.
- Logie, R., Wright, R. and Decker, S. [1992], ‘Recognition memory performance and residential burglary’, *Applied Cognitive Psychology* **6**(2), 109–123.
- Lovelace, J. B., Bundy, J., Pollock, T. G. and Hambrick, D. C. [2022], ‘The push and pull of attaining CEO celebrity: A media routines perspective’, *Academy of Management Journal* **65**(4), 1169–1191.
- Malenko, N. [2024], Chapter 14: Information flows, organizational structure, and corporate governance, in ‘Handbook of Corporate Finance’, Elgar Online.
- Marino, A. M. and Matsusaka, J. G. [2005], ‘Decision processes, agency problems, and information: An economic analysis of capital budgeting procedures’, *The Review of Financial Studies* **18**(1), 301–325.
- Marshall, N. T., Wegner, J. and Zechman, S. [2025], ‘From mic to market: An empirical analysis of CEO podcast appearances’, *Working Paper*.
- Meloy, J., Amman, M. and Hoffman, J. [2021], Public figure stalking and attachks, in ‘International Handbook of Threat Assessment’, 2 edn, Oxford University Press, pp. 166–188.
- Nagar, V. [2002], ‘Delegation and incentive compensation’, *The Accounting Review* **77**(2), 379–395.
- Priks, M. [2015], ‘The effects of surveillance cameras on crime: Evidence from the Stockholm subway’, *Economic Journal* **125**(588), F289–F305.
- Shapiro, J. N. and Siegel, D. A. [2010], ‘Is this paper dangerous? Balancing secrecy and openness in counterterrorism’, *Security Studies* **19**(1), 66–98.
- Vannini, M., Detotto, C. and McCannon, B. [2015], Ransom kidnapping, in ‘Encyclopedia of Law and Economics’, Springer Science, pp. 1–12.
- Yermack, D. [2006], ‘Flights of fancy: Corporate jets, CEO perquisites, and inferior shareholder returns’, *Journal of Financial Economics* **80**(1), 211–242.
- Yermack, D. [2014], ‘Tailspotting: Identifying and profiting from CEO vacation trips’, *Journal of Financial Economics* **113**(2), 252–269.
- Yonker, S. E. [2017], ‘Do managers give hometown labor an edge?’, *The Review of Financial Studies* **30**(10), 3581–3604.

Table 1: **Sample Selection**

	Firm-Years	Firms
Hand-collected security data	11,299	717
<i>U.S.-headquartered firms and S&P 500 members at any time 2006–2024</i>		
<i>Fiscal year end between Dec 31, 2006, and May 31, 2025</i>		
<i>Basic data from Compustat, CRSP, and ExecuComp</i>		
<i>CEOs classified as CEO on ExecuComp (CEOANN)</i>		
<i>Proxy (or similar) statement available</i>		
Missing Compustat/CRSP data	-344	-9
Missing ExecuComp/BoardEx data	-611	-36
Missing data on Wikipedia pages	-4	0
Fiscal years not equal to 12 months and singletons	-23	-8
Main sample (security policies)	10,317	664
Subsamples security expenses		
<i>Firms that report in at least one year expenses > 0</i>		
<i>CEOs in office for at least 11 months of the fiscal year</i>		
Any security	5,364	345
Home security	3,731	237
Air security	4,131	261
Other subsamples		
<i>Security policies</i>		
Workforce Reductions	9,821	662
CEO visibility (RavenPack)	9,019	654
CEO visibility (Wikipedia page views)	4,296	579
Reputation risk (ESG & SEC)	5,306	518
Reputation risk (compensation)	7,421	630

Table 2: Security Policies over Time

Panel A: Security Policies

Year	N	Share of Firms with Security Covering							
		Home	Car	Air	Home & Car	Home & Air	Car & Air	All	Any
2006	424	0.212	0.134	0.288	0.078	0.158	0.104	0.066	0.361
2007	541	0.194	0.116	0.255	0.065	0.150	0.083	0.055	0.323
2008	555	0.187	0.115	0.243	0.058	0.146	0.074	0.047	0.315
2009	565	0.177	0.110	0.242	0.050	0.135	0.073	0.041	0.313
2010	561	0.178	0.116	0.248	0.053	0.135	0.073	0.045	0.324
2011	558	0.174	0.111	0.246	0.052	0.133	0.070	0.047	0.323
2012	560	0.168	0.105	0.237	0.046	0.123	0.062	0.038	0.316
2013	562	0.165	0.101	0.240	0.043	0.125	0.064	0.034	0.310
2014	568	0.165	0.102	0.248	0.042	0.130	0.069	0.035	0.310
2015	561	0.173	0.111	0.246	0.046	0.132	0.071	0.037	0.317
2016	555	0.169	0.114	0.247	0.047	0.130	0.072	0.036	0.317
2017	555	0.180	0.121	0.258	0.050	0.135	0.074	0.038	0.337
2018	544	0.178	0.127	0.259	0.059	0.142	0.081	0.046	0.329
2019	544	0.188	0.123	0.265	0.061	0.145	0.085	0.050	0.335
2020	544	0.191	0.121	0.298	0.062	0.153	0.086	0.053	0.362
2021	544	0.200	0.125	0.309	0.068	0.158	0.092	0.057	0.373
2022	543	0.228	0.131	0.328	0.070	0.186	0.098	0.059	0.392
2023	539	0.254	0.143	0.338	0.085	0.200	0.109	0.074	0.414
2024	494	0.296	0.160	0.366	0.099	0.223	0.117	0.081	0.464
All years	10,317	0.193	0.120	0.271	0.059	0.149	0.081	0.049	0.343

Panel B: Adoptions and Terminations in Security Policies

Share of Firms with Adoptions or Terminations in							
Year	N	Security Covering			Any Security		
		Home	Car	Air	Any	Within CEO Spell	New CEO
2007	432	0.044	0.002	0.035	0.042	0.035	0.007
2008	555	0.023	0.011	0.022	0.027	0.018	0.009
2009	565	0.019	0.005	0.019	0.025	0.016	0.009
2010	561	0.020	0.009	0.018	0.030	0.020	0.011
2011	558	0.023	0.005	0.027	0.029	0.020	0.009
2012	560	0.013	0.014	0.011	0.020	0.013	0.007
2013	562	0.009	0.007	0.018	0.018	0.012	0.005
2014	566	0.019	0.007	0.019	0.028	0.023	0.005
2015	561	0.020	0.011	0.012	0.021	0.014	0.007
2016	554	0.013	0.011	0.016	0.023	0.014	0.009
2017	554	0.034	0.011	0.027	0.034	0.029	0.005
2018	544	0.031	0.015	0.022	0.028	0.017	0.011
2019	542	0.024	0.015	0.031	0.037	0.026	0.011
2020	542	0.037	0.011	0.044	0.048	0.031	0.017
2021	543	0.031	0.013	0.026	0.039	0.029	0.009
2022	543	0.039	0.011	0.042	0.042	0.033	0.009
2023	539	0.048	0.009	0.028	0.043	0.039	0.004
2024	494	0.069	0.016	0.038	0.061	0.051	0.010
All years	9,775	0.028	0.010	0.025	0.033	0.024	0.009

Notes: The table displays descriptive information on CEO security policies and changes therein by fiscal year. Panel A shows the share of firms with home security policies (Home), car security policies (Car), air security policies (Air), and their combinations: home and car security (Home & Car), home and air security (Home & Air), car and air security (Car & Air), all three types of security (All), and any of them (Any). Panel B shows the share of firms that change, i.e., adopt or terminate, security policies for home, car, air, and any, and breaks down the change in any security into changes within CEO spell (Within CEO Spell) and changes because of CEO turnover (New CEO). Samples include 664 firms.

Table 3: **CEOs Ranked by Personal Security Expenses***Average Expense within CEO Spell*Panel A: **Top 10 Total Personal Security Expenses**

Company	CEO	Average Expense
Meta Platforms, Inc.	Mark Elliot Zuckerberg	11,326.960
Alphabet Inc.	Sundar Pichai	5,066.968
Salesforce, Inc.	Marc R. Benioff	3,823.358
Las Vegas Sands Corp.	Sheldon Gary Adelson	3,457.177
Workday, Inc.	Aneel Bhusri	2,721.268
Palantir Technologies Inc.	Alexander C. Karp	2,427.074
Oracle Corp.	Lawrence J. Ellison	1,779.054
Las Vegas Sands Corp.	Robert Glen Goldstein	1,668.474
Walt Disney Company	Robert A. Iger	1,658.071
Amazon.com, Inc.	Jeffrey P. Bezos	1,633.920

Panel B: **Top 3 Home, Car, and Air Personal Security Expenses**

Company	CEO	Average Expense
HOME SECURITY EXPENSES		
Meta Platforms, Inc.	Mark Elliot Zuckerberg	9,622.375
Alphabet Inc.	Sundar Pichai	5,066.968
Las Vegas Sands Corp.	Sheldon Gary Adelson	3,457.177
CAR SECURITY EXPENSES		
Apollo Global Management, Inc.	Marc Jeffrey Rowan	288.535
BXP, Inc.	Mortimer B. Zuckerman	273.238
Vornado Realty Trust	Steven Roth	268.111
AIR SECURITY EXPENSES		
Meta Platforms, Inc.	Mark Elliot Zuckerberg	1,704.589
Palantir Technologies Inc.	Alexander C. Karp	1,258.090
Salesforce, Inc.	Marc R. Benioff	891.838

Notes: The table displays the CEOs with the highest personal security expenses. Panel A shows the ten highest-paid CEOs in terms of total personal security expenses, i.e., the sum of home, car, and air security expenses; and Panel B the three highest-paid CEOs in terms of home security expenses, car security expenses, and air security expenses separately. To rank CEOs, we use the average of all positive values for security expenses within CEO spell. In this table, we use inflation-adjusted expenses, but we do not winsorize values and do not adjust for unreported amounts below thresholds.

Table 4: Descriptive Statistics

Panel A: Personal Security

	Home Security	Car Security	Air Security
DISCLOSURE		N	
Security policy, with			
Amount = 0	64	36	295
Amount < threshold	649	274	94
Amount disclosed or bundled in other	1,274	926	2,402
	1,987	1,236	2,791
COMPENSATION PACKAGE		mean (median)	
For disclosed amounts, security expenses as			
share of total compensation	0.053 (0.003)	0.013 (0.002)	0.013 (0.008)
share of other compensation	0.281 (0.131)	0.195 (0.115)	0.399 (0.355)

Panel B: Variables in the Analysis

	N	mean	SD	1 st pc	25 th pc	median	75 th pc	99 th pc
PERSONAL SECURITY								
any_sec _{ijt}	10,317	0.343						
home_sec _{ijt}	10,317	0.193						
air_sec _{ijt}	10,317	0.271						
sec_exp _{ijt}	5,364	135.034	249.914	0.000	0.000	27.204	167.352	1,332.017
ln(sec_exp) _{ijt}	5,364	2.798	2.528	0.000	0.000	3.339	5.126	7.195
home_sec_exp _{ijt}	3,731	69.005	183.472	0.000	0.000	0.000	36.869	908.515
ln(home_sec_exp) _{ijt}	3,731	1.805	2.195	0.000	0.000	0.000	3.634	6.813
air_sec_exp _{ijt}	4,131	90.887	127.510	0.000	0.000	32.633	140.967	523.124
ln(air_sec_exp) _{ijt}	4,131	2.655	2.446	0.000	0.000	3.516	4.956	6.262
CEO								
ceo_chair _{i(t-1)}	10,317	0.493						
tenure _{ijt}	10,317	7.449	6.238	0.550	2.995	5.747	9.999	30.998
ln(tenure) _{ijt}	10,317	1.646	0.912	-0.597	1.097	1.749	2.302	3.434
founder _{ij}	10,317	0.118						
wiki_edits _{ij(t-1)}	10,317	7.781	24.336	0.000	0.000	0.000	3.000	172.000
ln(wiki_edits) _{ij(t-1)}	10,317	0.788	1.341	0.000	0.000	0.000	1.386	5.153
wiki_views _{ij(t-1)}	4,296	44,277.699	184,285.852	0.000	0.000	0.000	9,409.500	1,423,644.000
ln(wiki_views) _{ij(t-1)}	4,296	3.576	4.981	0.000	0.000	0.000	9.150	14.169

Panel B: Variables in the Analysis (*Continued*)

	N	mean	SD	1 st pc	25 th pc	median	75 th pc	99 th pc
<i>wsj_ceo_{ij(t-1)}</i>	9,019	0.318	1.531	0.000	0.000	0.000	0.000	12.000
<i>ln(wsj_ceo)_{ij(t-1)}</i>	9,019	0.109	0.413	0.000	0.000	0.000	0.000	2.565
<i>res(comp)_{ij(t-1)}</i>	7,421	0.104	0.479	-1.233	-0.172	0.085	0.378	1.456
<i>pay_gap_{ij(t-1)}</i>	7,421	8.686	0.803	5.926	8.320	8.796	9.199	10.550
<i>ownership_{ij(t-1)}</i>	7,421	0.656	1.970	0.002	0.052	0.130	0.353	14.302
FIRM								
<i>assets_{i(t-1)}</i>	10,317	50,052.325	132,215.347	400.775	4,933.853	12,174.176	35,485.875	983,160.062
<i>ln(assets)_{i(t-1)}</i>	10,317	9.531	1.505	5.993	8.504	9.407	10.477	13.799
<i>market_book_{i(t-1)}</i>	10,317	2.335	1.710	0.887	1.274	1.760	2.678	10.560
<i>rd_intensity_{i(t-1)}</i>	10,317	0.038	0.074	0.000	0.000	0.000	0.037	0.401
<i>sd(return)_{i(t-1)}</i>	10,317	0.085	0.045	0.027	0.054	0.074	0.103	0.272
<i>board_size_{i(t-1)}</i>	10,317	10.611	2.158	6.000	9.000	11.000	12.000	17.000
<i>ln(board_size)_{i(t-1)}</i>	10,317	2.341	0.206	1.792	2.197	2.398	2.485	2.833
<i>independence_{i(t-1)}</i>	10,317	0.868	0.067	0.625	0.846	0.889	0.909	1.000
<i>other_boards_{i(t-1)}</i>	10,317	2.019	0.483	1.091	1.692	2.000	2.308	3.571
<i>return_{i(t-1)}</i>	10,317	0.152	0.353	-0.636	-0.061	0.128	0.329	1.443
<i>sales_growth_{i(t-1)}</i>	10,317	0.089	0.198	-0.426	-0.002	0.066	0.150	0.963
<i>roa_{i(t-1)}</i>	10,317	0.067	0.081	-0.208	0.023	0.058	0.106	0.327
<i>lev_{i(t-1)}</i>	10,317	0.285	0.194	0.000	0.138	0.268	0.405	0.932
<i>layoff_{it}</i>	9,821	0.121						
<i>major_layoff_{it}</i>	9,821	0.073						
<i>wsj_firm_{i(t-1)}</i>	9,019	9.920	30.812	0.000	0.000	0.000	5.000	221.000
<i>ln(wsj_firm)_{i(t-1)}</i>	9,019	1.032	1.358	0.000	0.000	0.000	1.792	5.403
<i>esg_risk_{i(t-1)}</i>	5,306	0.137	0.131	0.000	0.000	0.138	0.221	0.564
<i>sec_inv_{i(t-1)}</i>	5,306	0.217						

Panel C: Correlations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) <i>any_sec_{ijt}</i>	1.000						
(2) <i>home_sec_{ijt}</i>	0.676***	1.000					
(3) <i>air_sec_{ijt}</i>	0.843***	0.551***	1.000				
(4) <i>ceo_chair_{i(t-1)}</i>	0.211***	0.209***	0.192***	1.000			
(5) <i>ln(tenure)_{ijt}</i>	0.029***	0.029***	0.000	0.260***	1.000		
(6) <i>founder_{ij}</i>	0.018*	0.009	-0.019*	0.112***	0.331***	1.000	
(7) <i>ln(wiki_edits)_{ij(t-1)}</i>	0.332***	0.349***	0.269***	0.105***	0.146***	0.215***	1.000

Notes: The table displays descriptive statistics for personal security in Panel A, summary statistics for the variables used in the analysis in Panel B, and Pearson correlations for a selected set of variables in Panel C. Panel A shows, for home, car, and air security, the number of observations with personal security policies, separated by whether and how security expenses are disclosed. For the observations with disclosed amounts of security expenses, the bottom of Panel A shows the mean and median shares that security expenses make up of total and other compensation. In Panels B and C, *i* denotes firm, *j* CEO spell, and *t* fiscal year. Variable definitions are provided in Appendix A.1. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table 5: Main Model

Panel A: Security Policies

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>			
<i>ceo_chair_{i(t-1)}</i>	0.104*** (0.022)	0.040*** (0.014)	0.105*** (0.018)	0.044*** (0.013)	0.091*** (0.021)	0.038*** (0.013)
<i>ln(tenure)_{ijt}</i>	0.009 (0.008)	0.013** (0.005)	-0.003 (0.007)	0.013*** (0.004)	0.003 (0.008)	0.008* (0.005)
<i>founder_{ij}</i>	0.038 (0.044)	-0.070 (0.048)	0.009 (0.031)	-0.080** (0.040)	0.020 (0.045)	-0.064 (0.051)
<i>ln(wiki_edits)_{ij(t-1)}</i>	0.045*** (0.010)	0.022*** (0.008)	0.055*** (0.009)	0.013* (0.007)	0.028*** (0.010)	0.013* (0.007)
<i>ln(assets)_{i(t-1)}</i>	0.117*** (0.013)	0.048*** (0.014)	0.085*** (0.012)	0.046*** (0.013)	0.103*** (0.013)	0.018 (0.014)
<i>market_book_{i(t-1)}</i>	0.014* (0.007)	0.002 (0.005)	0.011** (0.006)	0.001 (0.005)	0.012* (0.007)	0.000 (0.005)
<i>rd_intensity_{i(t-1)}</i>	-0.291 (0.222)	0.350 (0.261)	-0.077 (0.166)	0.396* (0.236)	-0.420* (0.222)	0.170 (0.223)
<i>sd(return)_{i(t-1)}</i>	-0.078 (0.209)	0.028 (0.103)	0.146 (0.160)	0.012 (0.075)	-0.119 (0.202)	-0.051 (0.099)
<i>ln(board_size)_{i(t-1)}</i>	0.098 (0.060)	0.025 (0.039)	0.052 (0.053)	0.029 (0.036)	0.124** (0.059)	0.038 (0.038)
<i>independence_{i(t-1)}</i>	-0.279 (0.195)	-0.009 (0.109)	-0.001 (0.130)	0.030 (0.095)	-0.150 (0.204)	-0.047 (0.105)
<i>other_boards_{i(t-1)}</i>	0.080*** (0.025)	-0.001 (0.017)	0.020 (0.020)	0.015 (0.014)	0.077*** (0.025)	-0.009 (0.016)
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. <i>R</i> ²	0.350	0.767	0.294	0.722	0.311	0.777
adj. within- <i>R</i> ²	0.216	0.024	0.195	0.027	0.185	0.011
N	10,317	10,317	10,317	10,317	10,317	10,317

Panel B: Security Expenses

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$			
$ceo_chair_{i(t-1)}$	0.669*** (0.151)	0.233* (0.136)	0.667*** (0.142)	0.299** (0.133)	0.400** (0.170)	0.256 (0.156)
$\ln(tenure)_{ijt}$	0.198*** (0.070)	0.223*** (0.062)	0.174** (0.073)	0.208*** (0.068)	0.375*** (0.071)	0.275*** (0.063)
$founder_{ij}$	0.576* (0.306)	-0.137 (0.594)	0.397 (0.389)	-0.391 (0.690)	0.013 (0.396)	-0.593 (0.597)
$\ln(wiki_edits)_{ij(t-1)}$	0.250*** (0.057)	0.238*** (0.055)	0.323*** (0.059)	0.179*** (0.056)	0.123* (0.063)	0.183*** (0.061)
$\ln(assets)_{i(t-1)}$	0.410*** (0.085)	0.591*** (0.134)	0.179** (0.084)	0.541*** (0.131)	0.317*** (0.105)	0.550*** (0.181)
$market_book_{i(t-1)}$	0.104** (0.050)	0.085 (0.062)	0.053 (0.058)	0.042 (0.071)	0.086 (0.063)	0.061 (0.080)
$rd_intensity_{i(t-1)}$	-2.657 (1.762)	3.967 (2.556)	-1.413 (1.556)	5.607** (2.434)	-1.139 (2.121)	3.523 (2.839)
$sd(return)_{i(t-1)}$	-1.518 (1.515)	-0.389 (1.025)	-0.784 (1.420)	-0.577 (0.998)	-1.235 (1.686)	-1.585 (1.220)
$\ln(board_size)_{i(t-1)}$	-0.232 (0.405)	0.396 (0.374)	-0.004 (0.458)	0.186 (0.400)	0.012 (0.416)	0.442 (0.431)
$independence_{i(t-1)}$	-1.720 (1.141)	0.220 (1.169)	-2.523* (1.298)	0.809 (1.249)	-0.550 (1.539)	-0.292 (1.379)
$other_boards_{i(t-1)}$	0.461*** (0.160)	0.098 (0.166)	0.193 (0.169)	0.179 (0.170)	0.413** (0.187)	0.045 (0.191)
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. R^2	0.347	0.627	0.328	0.549	0.308	0.581
adj. within- R^2	0.165	0.076	0.156	0.084	0.094	0.067
N	5,364	5,364	3,731	3,731	4,131	4,131

Notes: The table displays the regression results for the main analysis of personal security, for security policies in Panel A and security expenses in Panel B. The sample includes 664 firms and the years 2006–2024 in Panel A; the samples in Panel B are subsamples thereof including only firms that report in at least one sample year security expenses greater than zero. i denotes firm, j CEO spell, and t fiscal year. any_sec_{ijt} is an indicator variable equal to one if the firm reports home, car, or air personal security. $home_sec_{ijt}$ is an indicator variable equal to one if the firm reports home personal security expenses greater than zero, or otherwise mentions that home security is provided. air_sec_{ijt} is an indicator variable equal to one if the firm reports expenses greater than zero for use of company aircraft for security purposes, or otherwise mentions that company aircraft use is required, encouraged, or allowed when security concerns are present. $\ln(sec_exp)_{ijt}$ is the natural logarithm of one plus total personal security expenses, i.e., the sum of home, car, and air security expenses. $\ln(home_sec_exp)_{ijt}$ is the natural logarithm of one plus home personal security expenses. $\ln(air_sec_exp)_{ijt}$ is the natural logarithm of one plus expenses for use of the company aircraft for security purposes. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under CONTROLS [$return_{i(t-1)}$, $sales_growth_{i(t-1)}$, $roa_{i(t-1)}$, and $lev_{i(t-1)}$]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table 6: **Workforce Reductions**
Security Policies

Panel A: All Layoffs with Negative News Sentiment

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>			
<i>ceo_chair_{i(t-1)}</i>	0.103*** (0.022)	0.043*** (0.014)	0.105*** (0.018)	0.044*** (0.013)	0.087*** (0.021)	0.038*** (0.013)
<i>ln(tenure)_{ijt}</i>	0.011 (0.009)	0.012** (0.005)	-0.002 (0.007)	0.013*** (0.005)	0.006 (0.008)	0.008* (0.005)
<i>founder_{ij}</i>	0.039 (0.044)	-0.069 (0.048)	0.008 (0.031)	-0.088** (0.042)	0.021 (0.045)	-0.056 (0.051)
<i>ln(wiki_edits)_{ij(t-1)}</i>	0.045*** (0.010)	0.023*** (0.008)	0.055*** (0.009)	0.014** (0.007)	0.027*** (0.010)	0.014** (0.007)
<i>layoff_{i(t+1)}</i>	0.038** (0.016)	0.014 (0.011)	0.037** (0.015)	0.015 (0.010)	0.034** (0.017)	0.004 (0.011)
<i>layoff_{it}</i>	0.019 (0.015)	0.000 (0.011)	0.026* (0.014)	0.004 (0.010)	0.023 (0.015)	0.001 (0.010)
<i>layoff_{i(t-1)}</i>	0.020 (0.016)	0.003 (0.010)	0.030** (0.014)	0.007 (0.010)	0.024 (0.016)	-0.006 (0.010)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. <i>R</i> ²	0.353	0.778	0.295	0.736	0.314	0.788
adj. within- <i>R</i> ²	0.219	0.024	0.197	0.027	0.189	0.012
N	9,821	9,821	9,821	9,821	9,821	9,821

Panel B: Layoffs with Pronounced Negative News Sentiment

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>			
<i>ceo_chair_{i(t-1)}</i>	0.104*** (0.022)	0.043*** (0.014)	0.106*** (0.018)	0.045*** (0.013)	0.088*** (0.021)	0.038*** (0.013)
<i>ln(tenure)_{ijt}</i>	0.011 (0.009)	0.012** (0.005)	-0.002 (0.007)	0.013*** (0.005)	0.005 (0.008)	0.008* (0.005)
<i>founder_{ij}</i>	0.040 (0.044)	-0.068 (0.048)	0.009 (0.031)	-0.086** (0.042)	0.022 (0.045)	-0.056 (0.051)
<i>ln(wiki_edits)_{ij(t-1)}</i>	0.045*** (0.010)	0.023*** (0.008)	0.055*** (0.009)	0.014** (0.007)	0.027*** (0.010)	0.014** (0.007)
<i>major_layoff_{i(t+1)}</i>	0.068*** (0.018)	0.028** (0.013)	0.063*** (0.016)	0.032** (0.013)	0.045*** (0.017)	0.011 (0.011)
<i>major_layoff_{it}</i>	0.043** (0.017)	0.008 (0.013)	0.047*** (0.016)	0.019 (0.014)	0.033* (0.017)	0.004 (0.012)
<i>major_layoff_{i(t-1)}</i>	0.031* (0.018)	-0.004 (0.012)	0.039** (0.016)	0.013 (0.012)	0.032* (0.018)	-0.005 (0.010)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. <i>R</i> ²	0.354	0.778	0.296	0.736	0.314	0.788
adj. within- <i>R</i> ²	0.220	0.025	0.199	0.028	0.189	0.012
N	9,821	9,821	9,821	9,821	9,821	9,821

Notes: The table displays the regression results for the analysis of workforce reductions that we identify as announcements of layoffs or similar events with negative news sentiment around the announcement date in Panel A, and as the subset with below-median negative news sentiment in Panel B. The sample includes 662 firms and the years 2006–2023. *i* denotes firm, *j* CEO spell, and *t* fiscal year. *layoff_{it}* is an indicator variable equal to one if the firm announces at least one layoff or similar event with negative news sentiment in the seven-day period centered on the announcement date during the fiscal year. *major_layoff_{it}* is an indicator variable equal to one if the firm announces at least one layoff or similar event with below-median negative news sentiment in the seven-day period centered on the announcement date during the fiscal year. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under FIRM CHARACTERISTICS [listed in Equation 1] and CONTROLS [*return_{i(t-1)}*, *sales_growth_{i(t-1)}*, *roa_{i(t-1)}*, and *lev_{i(t-1)}*]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table 7: **CEO Visibility**
Security Policies

Panel A: **WSJ Coverage of CEO and Firm**

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>			
<i>ceo_chair_{i(t-1)}</i>	0.117*** (0.025)	0.051*** (0.019)	0.121*** (0.021)	0.061*** (0.017)	0.104*** (0.024)	0.049** (0.017)
<i>ln(tenure)_{ijt}</i>	0.005 (0.013)	0.014 (0.009)	-0.009 (0.011)	0.010 (0.008)	-0.001 (0.013)	0.008 (0.008)
<i>founder_{ij}</i>	0.031 (0.046)	-0.093* (0.052)	0.008 (0.032)	-0.094** (0.045)	0.018 (0.047)	-0.073 (0.056)
<i>ln(wiki_edits)_{ij(t-1)}</i>	0.044*** (0.010)	0.025*** (0.008)	0.048*** (0.009)	0.011 (0.008)	0.028*** (0.010)	0.015** (0.008)
<i>ln(wsj_ceo)_{ij(t-1)}</i>	-0.063** (0.025)	-0.008 (0.017)	-0.021 (0.027)	-0.003 (0.015)	-0.092*** (0.029)	-0.027 (0.018)
<i>ln(wsj_firm)_{i(t-1)}</i>	0.033*** (0.012)	-0.009 (0.006)	0.039*** (0.010)	-0.009 (0.006)	0.040*** (0.012)	-0.007 (0.006)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. <i>R</i> ²	0.353	0.767	0.299	0.723	0.314	0.777
adj. within- <i>R</i> ²	0.213	0.026	0.199	0.030	0.186	0.015
N	9,019	9,019	9,019	9,019	9,019	9,019

Panel B: Secular Visibility

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>			
<i>ceo_chair_{i(t-1)}</i>	0.126*** (0.031)	0.007 (0.019)	0.104*** (0.025)	0.029* (0.017)	0.126*** (0.030)	0.020 (0.018)
<i>ln(tenure)_{ijt}</i>	0.000 (0.012)	0.016** (0.008)	-0.017* (0.010)	0.010 (0.007)	-0.011 (0.012)	0.007 (0.007)
<i>founder_{ij}</i>	0.079 (0.059)	-0.006 (0.090)	0.076* (0.043)	-0.054 (0.072)	0.032 (0.061)	-0.168** (0.084)
<i>ln(wiki_views)_{ij(t-1)}</i>	0.013*** (0.004)	0.003 (0.003)	0.015*** (0.003)	0.006** (0.003)	0.011*** (0.003)	0.003 (0.003)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. <i>R</i> ²	0.331	0.812	0.303	0.774	0.327	0.829
adj. within- <i>R</i> ²	0.208	0.015	0.199	0.021	0.205	0.010
N	4,296	4,296	4,296	4,296	4,296	4,296

Notes: The table displays the regression results for the additional analysis of CEO visibility, with a focus on Wall Street Journal coverage in Panel A and secular visibility in Panel B. The sample includes 654 firms and the years 2006–2024 in Panel A, and the sample includes 579 firms and the years 2017–2024 in Panel B. *i* denotes firm, *j* CEO spell, and *t* fiscal year. *ln(wsj_ceo)_{ij(t-1)}* is the natural logarithm of one plus the number of articles in the Wall Street Journal related to the CEO during the fiscal year. *ln(wsj_firm)_{i(t-1)}* is the natural logarithm of one plus the number of articles in the Wall Street Journal related to the firm during the fiscal year. *ln(wiki_views)_{ij(t-1)}* is the natural logarithm of one plus the number of page views on the CEO's Wikipedia page. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under FIRM CHARACTERISTICS [listed in Equation 1] and CONTROLS [*return_{i(t-1)}*, *sales_growth_{i(t-1)}*, *roa_{i(t-1)}*, and *lev_{i(t-1)}*]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table 8: **Reputation Effects**
Security Policies

Panel A: **ESG Risk and SEC Investigations**

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>		
<i>ceo_chair_{i(t-1)}</i>	0.107*** (0.027)	0.030** (0.014)	0.109*** (0.023)	0.034** (0.014)	0.074*** (0.026)
<i>ln(tenure)_{ijt}</i>	0.017 (0.011)	0.016** (0.006)	0.008 (0.009)	0.015*** (0.005)	0.021** (0.011)
<i>founder_{ij}</i>	-0.004 (0.051)	-0.058 (0.045)	-0.033 (0.036)	-0.065** (0.027)	-0.018 (0.050)
<i>ln(wiki_edits)_{ij(t-1)}</i>	0.040*** (0.012)	0.015* (0.009)	0.039*** (0.011)	0.006 (0.007)	0.024** (0.012)
<i>esg_risk_{i(t-1)}</i>	0.283** (0.143)	0.052 (0.058)	0.430*** (0.123)	-0.032 (0.046)	0.410*** (0.144)
<i>sec_inv_{i(t-1)}</i>	-0.034 (0.025)	-0.008 (0.013)	0.009 (0.020)	-0.001 (0.011)	-0.011 (0.025)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes
Fixed effects					
Fiscal year	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes
Firm	no	yes	no	yes	no
adj. <i>R</i> ²	0.379	0.849	0.328	0.831	0.338
adj. within- <i>R</i> ²	0.224	0.019	0.204	0.022	0.188
N	5,306	5,306	5,306	5,306	5,306

Panel B: Excess Compensation

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>			
<i>ceo_chair_{i(t-1)}</i>	0.098*** (0.026)	0.046** (0.021)	0.109*** (0.021)	0.067*** (0.019)	0.094*** (0.025)	0.038** (0.019)
<i>ln(tenure)_{ijt}</i>	0.003 (0.015)	0.007 (0.011)	-0.010 (0.013)	0.006 (0.010)	-0.003 (0.015)	0.003 (0.010)
<i>founder_{ij}</i>	0.050 (0.054)	-0.062 (0.057)	0.008 (0.037)	-0.067 (0.047)	0.062 (0.057)	-0.025 (0.057)
<i>ln(wiki_edits)_{ij(t-1)}</i>	0.048*** (0.011)	0.015* (0.009)	0.056*** (0.010)	0.007 (0.008)	0.039*** (0.011)	0.014* (0.008)
<i>res(comp)_{ij(t-1)}</i>	0.036 (0.029)	0.005 (0.017)	0.005 (0.025)	-0.002 (0.014)	0.017 (0.030)	-0.001 (0.017)
<i>pay_gap_{ij(t-1)}</i>	0.049** (0.021)	0.013 (0.011)	0.032* (0.017)	0.011 (0.010)	0.065*** (0.022)	0.016 (0.011)
<i>ownership_{ij(t-1)}</i>	-0.004 (0.007)	0.001 (0.005)	-0.001 (0.005)	0.000 (0.004)	-0.010 (0.007)	0.002 (0.004)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. <i>R</i> ²	0.361	0.778	0.294	0.732	0.338	0.791
adj. within- <i>R</i> ²	0.221	0.016	0.190	0.023	0.208	0.011
N	7,421	7,421	7,421	7,421	7,421	7,421

Notes: The table displays the regression results for the additional analysis of security policies and reputation effects, for ESG risk and SEC investigations in Panel A and measures of excess compensation in Panel B. The sample includes 518 firms and the years 2008–2018 in Panel A, and 630 firms and the years 2007–2024 in Panel B. *i* denotes firm, *j* CEO spell, and *t* fiscal year. *esg_risk_{i(t-1)}* is risk exposure to ESG issues, computed as the average of the daily values of the RepRisk Index throughout the firm's fiscal year. *sec_inv_{i(t-1)}* is an indicator variable equal to one if the firm is subject to at least one opened, closed, or ongoing SEC investigation. *res(comp)_{ij(t-1)}* is the residual from a regression of the natural logarithm of total compensation excluding security expenses on compensation determinants. *pay_gap_{ij(t-1)}* is the natural logarithm of the difference between the compensation of the CEO and the median compensation of the next four highest-paid executives, where compensation corresponds to total compensation less other compensation. *ownership_{ij(t-1)}* is the percentage of company stock held by the CEO. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under FIRM CHARACTERISTICS [listed in Equation 1] and CONTROLS [*return_{i(t-1)}*, *sales_growth_{i(t-1)}*, *roa_{i(t-1)}*, and *lev_{i(t-1)}*]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table 9: **Car Security**
Security Policies and Expenses

	<i>car_sec_{ijt}</i>	<i>ln(car_sec_exp)_{ijt}</i>		
<i>ceo_chair_{i(t-1)}</i>	0.039** (0.017)	0.021** (0.010)	0.250 (0.201)	0.064 (0.171)
<i>ln(tenure)_{ijt}</i>	−0.002 (0.007)	0.001 (0.004)	0.159* (0.090)	0.087 (0.077)
<i>founder_{ij}</i>	−0.013 (0.029)	0.020 (0.034)	0.093 (0.353)	0.742 (0.504)
<i>ln(wiki_edits)_{ij(t-1)}</i>	0.021** (0.008)	0.013** (0.006)	0.188*** (0.065)	0.182*** (0.062)
<i>ln(assets)_{i(t-1)}</i>	0.043*** (0.011)	0.028** (0.012)	0.086 (0.080)	0.509*** (0.157)
<i>market_book_{i(t-1)}</i>	0.004 (0.005)	−0.002 (0.003)	−0.079 (0.064)	−0.022 (0.064)
<i>rd_intensity_{i(t-1)}</i>	0.026 (0.164)	0.019 (0.163)	−1.764 (2.229)	−0.426 (3.087)
<i>sd(return)_{i(t-1)}</i>	−0.019 (0.150)	0.062 (0.073)	−0.955 (1.729)	0.993 (1.516)
<i>ln(board_size)_{i(t-1)}</i>	−0.024 (0.054)	0.029 (0.038)	0.292 (0.536)	0.734 (0.537)
<i>independence_{i(t-1)}</i>	−0.013 (0.132)	−0.065 (0.078)	0.180 (1.297)	−0.603 (1.458)
<i>other_boards_{i(t-1)}</i>	0.049*** (0.017)	0.007 (0.012)	0.336* (0.192)	0.338 (0.241)
CONTROLS	yes	yes	yes	yes
Fixed effects				
Fiscal year	yes	yes	yes	yes
Industry and state	yes	no	yes	no
Firm	no	yes	no	yes
adj. <i>R</i> ²	0.294	0.785	0.350	0.561
adj. within- <i>R</i> ²	0.076	0.017	0.089	0.086
N	10,317	10,317	1,857	1,857

Notes: The table displays the regression results for the additional analysis of car security, for security policies in columns 1–2 and security expenses in columns 3–4. The sample in columns 1–2 includes 664 firms and the years 2006–2024. The sample in columns 3–4 is a subsample thereof that includes only firms that report in at least one sample year car security expenses greater than zero. *i* denotes firm, *j* CEO spell, and *t* fiscal year. *car_sec_{ijt}* is an indicator variable equal to one if the firm reports expenses greater than zero for driver and car, or otherwise mentions that driver and car are provided for personal transportation. *ln(car_sec_exp)_{ijt}* is the natural logarithm of one plus expenses for driver and car. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under CONTROLS [*return_{i(t-1)}*, *sales_growth_{i(t-1)}*, *roa_{i(t-1)}*, and *lev_{i(t-1)}*]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Online Appendix

Corporate Executive Protection

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OA.1 Example Disclosures CD&A

Firms often explain their rationale for providing protection and justify more comprehensive security programs in the proxy statement. Below, we include examples of such disclosures, with references to risks or threats, broader security programs, and external security advice shown in italics.

Company: Alphabet Inc.

CEO: Sundar Pichai

Security Policy: Home and car

Fiscal year end: December 31, 2024

“Includes \$8,267,123 for personal security. Due to Sundar’s significant public profile, Alphabet provides him with security protection. In 2024, Sundar’s security arrangements included residential security and consultation fees, security monitoring services, car and driver services, and personal security during all travel. We believe these arrangements and costs are reasonable, appropriate, necessary and in the best interests of Alphabet and its stockholders, as they mitigate risks to our business. We do not consider these additional security arrangements to be a personal benefit to Sundar because they arise from the nature of his employment responsibilities.”
[Summary Compensation Table]

Company: Eastman Kodak Company

CEO: Antonio M. Perez

Security Policy: Home

Fiscal year end: December 31, 2012

“In 2012, based upon the advice of our *external restructuring advisors*, the Company temporarily provided heightened security services for certain of our executive officers and their immediate family members in connection with the filing of chapter 11. Based on the guidance of our advisors, the Company determined that these services were necessary and appropriate for a company in bankruptcy, given *potential threats to the safety and security* of our executive officers and their immediate family members, and that it is common for companies in bankruptcy to engage such services in order to minimize any disruption in the ability of executive officers to devote time and attention to the business of the company. The executive protection services were provided by an independent security company for a period of time following the bankruptcy filing. The services primarily included security guards who were stationed at the homes of Messrs. Perez and Sheller and Mmes. McCorvey and Quatela and personal security protection for Mr. Perez [...]

In addition to the personal security described above, the Company provides ongoing home security services for Mr. Perez.” [Form 10-K/A, CD&A, ‘Perquisites’]

Company: FedEx Corporation

CEO: Frederick W. Smith

Security Policy: Home and air

Fiscal year end: May 31, 2019

“FedEx’s executive security procedures, which prescribe the level of personal security to be provided to the Chairman of the Board and Chief Executive Officer and other executive officers, are based on bona fide business-related security concerns and are an integral part of FedEx’s *overall risk management and security program*. These procedures have been assessed by an *independent security consulting firm*, and deemed necessary and appropriate for the protection of the officers and their families given the history of *direct security threats* against FedEx executives and the likelihood of *additional threats* against the officers. The security services and equipment provided to FedEx executive officers may be viewed as conveying personal benefits to the executives and, as a result, their values must be reported in the Summary Compensation Table.

With respect to Mr. Smith, consistent with FedEx’s executive security procedures, the Board of Directors requires him to use FedEx corporate aircraft for all travel, including personal travel. In addition, FedEx provides certain physical and personal security services for Mr. Smith, including on-site residential security at his primary residence. The Board of Directors believes that Mr. Smith’s personal safety and security are of the utmost importance to FedEx and its shareowners and, therefore, the costs associated with such security are appropriate and necessary business expenses.” [CD&A, ‘Perquisites, Tax Payments and Other Annual Compensation’]

Company: General Motors Company

CEO: Mary T. Barra

Security Policy: Home, car, and air

Fiscal year end: December 31, 2024

“Personal Air Travel — Due to security reasons identified by an *independent, third-party security consultant*, Company policy prohibits Ms. Barra from using commercial air travel for business or personal use. As a result, the Company pays the costs associated with both business and personal use of aircraft [...] Our Board of Directors regularly reviews executive officers’ air travel usage and compliance with the Company’s air travel policies and approves any revisions to air travel policies as needed.

Security — NEOs may receive security services, including home security systems and monitoring, for specific security-related reasons identified by an *independent, third-party security consultant* or our security team. We maintain security staff to help provide all employees with a safe and secure environment, which aligns to and reinforces our safety culture. Our Board of Directors regularly evaluates executive officers’ security policies. An updated security assessment was performed in early 2025 for Ms. Barra and Mr. Reuss, and as a result, heightened security services are expected to be provided in future years.” [CD&A, ‘Perquisites and Other Compensation’]

Company: Palantir Technologies, Inc.

CEO: Alexander Karp

Security Policy: Home and air

Fiscal year end: December 31, 2024

“Our NEOs have the opportunity to participate in the same benefits programs offered to all employees. In addition, our NEOs are provided additional benefits related to tax services, and

additional umbrella liability insurance coverage. Messrs. Karp and Cohen are also provided certain healthcare and/or medical services coverage. Furthermore, during 2024, certain of our executives were provided additional security-related benefits including the use of corporate or other private aircraft and certain security services. We believe that the perquisites provided to our NEOs are appropriate given the use of similar benefits at software and data analytics companies of comparable size and with similarly high public profiles and that the perquisites serve Palantir's interests by ensuring the safety of our key executives and our proprietary data. The security-related benefits provided to our executives result from a bona-fide business-related security concern given the nature of our business and their leadership roles at Palantir. The security-related benefits are regularly reviewed by third parties to determine if the benefits provided are consistent with those necessitated by the business-related security concern.

Due to the high profile nature of our CEO's work for us, we will provide Mr. Karp with security continuation support ("Continuation Support") following the termination of his employment with us, if his employment is terminated under certain conditions and he executes a separation agreement and release of claims. This Continuation Support generally will consist of the continuation of his security program as in effect immediately prior to Mr. Karp's termination for a specified period of time (which length will depend on whether the termination is an involuntary, voluntary, or other termination), plus additional payments sufficient to make the security continuation and such additional payments tax neutral to Mr. Karp. We offered Continuation Support to Mr. Karp, in part, because the risks that he faces as a result of his high-profile work on behalf of and association with Palantir are reasonably expected to continue following any termination of his employment." [CD&A, 'Other Benefits']

Company: Salesforce, Inc.

CEO: Marc Benioff

Security Policy: Home and air

Fiscal year end: January 31, 2024

"Security Program and Outside Security Study. We began providing a security program for Mr. Benioff in fiscal 2012 and continued to do so in fiscal 2024. The program includes security measures in addition to those provided while at work or on business travel. The Compensation Committee believes that costs associated with this security program have been and continue to be reasonable and for the Company's benefit, and that they are a necessary and appropriate business expense. Because certain components of Mr. Benioff's security program may be viewed as conveying a personal benefit to him, we have included those costs in amounts reported in the "All Other Compensation" column of the Summary Compensation Table.

Over the past year, the Company sought specific feedback from our major institutional investors on this topic, as it has done in the past. Overall, our stockholders agreed that a comprehensive personal security program for Mr. Benioff is an appropriate component of his overall executive compensation program, and that any such program should align with the executive's security profile.

The Company periodically assesses the security risk profiles of its senior executives, the external security environment, and appropriate executive protection measures. In connection with

this ongoing assessment, in fiscal 2024, the Compensation Committee directed the Company to engage an outside firm with security expertise to conduct a study of Mr. Benioff's security profile and program, as well as that of certain other NEOs (the "Outside Security Study"). The Outside Security Study concluded that the comprehensive security measures in place for Mr. Benioff are essential and commensurate with his risk profile.

Factors contributing to an executive's security profile include the size, location and activities of the company, the prominence of the company or the executive, overall public visibility and accessibility of the executive, and whether the company or executive is associated with controversial topics. Taking these factors into consideration, trends in the overall security climate, and the conclusions of the Outside Security Study, the Compensation Committee believes that a comprehensive personal security program for Mr. Benioff continues to be the right approach for his safety and for the Company and its stockholders.

The total costs associated with Mr. Benioff's security program include security measures to protect Mr. Benioff on a 24-hour basis. Historically, the Company paid various costs relating to surveillance, monitoring, and security services including at Mr. Benioff's residences, and Mr. Benioff covered certain expenses relating to security personnel and installation and maintenance of security equipment. The Compensation Committee determined that the personal security costs previously paid by Mr. Benioff are appropriate to be borne by the Company, beginning with fiscal 2024, consistent with the findings of the Outside Security Study. The Compensation Committee reviews these costs periodically throughout the year to assess whether they are reasonable.

Aircraft Use. Travel on private aircraft provides significant benefits in terms of safety, security, efficiency, privacy, confidentiality, flexibility and productivity, and is a component of the overall security program recommended for Mr. Benioff in the Outside Security Study. The Compensation Committee believes Mr. Benioff's use of private aircraft is appropriate, including for travel between Mr. Benioff's permanent residence and Company headquarters or other business destinations. The Compensation Committee considers this travel to be business-related and the associated costs to be appropriate business expenses directly related to Mr. Benioff's duties as CEO of a global public company."

Company: Schering-Plough Corporation

CEO: Fred Hassan

Security Policy: Home, car, and air

Fiscal year end: December 31, 2008

"Security — Schering-Plough provides home security systems to each named executive and provides personal security (bodyguards) to Hassan. In 2008, and prior years, the named executives have received *threats of personal harm* from animal rights activists and others based upon Schering-Plough's business. As a result, Schering-Plough believes this protection is necessary.

Transportation — Hassan has been directed by the Board to use the corporate-owned aircraft for all air travel including personal travel. This provides several business benefits to Schering-Plough. First, the policy is intended to ensure the personal safety of Hassan, who maintains a

significant public role as the leader of Schering-Plough. Second, the policy is intended to ensure his availability and to maximize the time available for Schering-Plough business [...]

In addition, for the same reasons described above, Schering-Plough makes one car and driver available to Hassan. The driver assigned to Hassan is also a trained security professional.” [CD&A, ‘Employee Benefits’]

Company: Uber Technologies, Inc.

CEO: Dara Khosrowshahi

Security Policy: Home, car, and air

Fiscal year end: December 31, 2023

“Because of the high visibility of our Company, our Board of Directors has authorized a *security program* for the protection of our most senior executives based on ongoing assessments of risk, as well as *actual and credible threats* made against our executive officers. We require these security measures for our benefit because of the importance of these executives to Uber, and we believe the costs of our security program are necessary and appropriate business expenses since they arise from the nature of the executives’ employment at Uber. Our Board of Directors regularly evaluates and approves the cost and components of our security program, based on comparative data regarding the cost and scope of security programs established by companies in the U.S., both within and outside of our peer group, and *professional assessments of safety threats* made against our executive officers. Since the implementation of our overall security program, each of these assessments has identified *actual and credible threats* to Mr. Khosrowshahi’s safety as a result of the high-profile nature of being our CEO.

Our *security program* consists of business-related and personal security services, including certified protection officers, and secure meeting spaces and accommodations for our executive officers, and the charter aircraft travel described below, as our security team deems necessary and appropriate. In addition, we provide residential security and commuting and other personal transportation services to Mr. Khosrowshahi as our CEO.” [CD&A, ‘Other Benefits’]

Company: Workday, Inc.

CEO: Aneel Bhusri

Security Policy: Home and air

Fiscal year end: January 31, 2023

“The personal safety and security of our employees is of the utmost importance to Workday and our stockholders. Accordingly, while we do not view perquisites or other personal benefits as a significant component of our executive compensation program, we provide limited perquisites for business-related purposes and necessary for the security of Mr. Bhusri. We also provided expatriate benefits to Mr. Fernandez while he served as Co-CEO in fiscal 2023, as described below.

As disclosed in our 2020 Proxy Statement, in fiscal 2020, in response to specific threats and incidents related to the safety of Mr. Bhusri, the Compensation Committee established an executive security policy and approved the implementation of security measures to help address these safety concerns. In March 2020, based on an independent study prepared by

an outside security consultant that analyzed security risks to Mr. Bhusri, the Compensation Committee approved a comprehensive security plan for Mr. Bhusri. Pursuant to this plan, we pay for the annual costs of security at his residences, executive security protection, and secure transportation arrangements. In August 2020, the Compensation Committee also approved the payment of certain security costs for Mr. Bhusri's family in response to threats against Mr. Bhusri and his family and to reduce distraction for Mr. Bhusri relating to credible concerns for his family's safety. We require these security measures because of the importance of Mr. Bhusri to Workday, and we believe that their scope and costs are an appropriate business expense for our benefit as they are integrally related to Mr. Bhusri's ability to perform his employment responsibilities and necessary to his focused job performance. However, because certain components of the program may be considered to be perquisites under SEC disclosure rules, such as security for Mr. Bhusri's family, security at his residences, and executive security protection outside of work hours, the aggregate incremental costs of such security services are included in the "All Other Compensation" column of the Summary Compensation Table set forth below. The Compensation Committee believes that these costs are appropriate in light of the threat landscape, Mr. Bhusri's importance to Workday, and the amount of Mr. Bhusri's total fiscal 2023 compensation. The Compensation Committee periodically reviews the nature and cost of this program in relation to Mr. Bhusri's security risk profile.

In fiscal 2022, the Board approved the purchase of a corporate aircraft as an additional security measure for Mr. Bhusri and to optimize his travel. Pursuant to our aircraft utilization policy, the corporate aircraft is primarily for use by Mr. Bhusri, with certain limited exceptions where other executives may use it for business purposes. Mr. Bhusri is also permitted to use a private business jet charter when practicable. The Compensation Committee regularly reviews our aircraft utilization policy. Pursuant to the policy, Mr. Bhusri recognizes imputed taxable income as a result of personal use of the corporate aircraft and other private aircraft and is not provided a tax reimbursement or gross-up for any portion of this amount, including as a result of members of his immediate family accompanying him on business travel. The non-de minimis incremental costs, if any, of personal travel and travel by guests on any such legs on private aircraft are included in the "All Other Compensation" column in the Summary Compensation Table." [CD&A, 'Perquisites and Other Personal Benefits']

OA.2 Board Mandate for Executive Protection Exemplar

Source: ASIS Community Forums

The Board of Directors recognizes the critical importance of ensuring the safety and security of our executives. As such, we hereby issue this mandate to establish a comprehensive and proactive approach to executive protection within our organization.

1. Objective:

The objective of this mandate is to provide a framework for the implementation of effective executive protection measures, with the primary goal of safeguarding the well-being and security of our executives.

2. Scope:

- a. The Executive Protection Team shall be responsible for designing and implementing appropriate security measures, protocols, and procedures to ensure the safety of our executives.
- b. The Executive Protection Team shall conduct regular risk assessments to identify potential threats and vulnerabilities, and develop strategies to mitigate them.
- c. The Executive Protection Team shall establish clear communication channels and protocols to ensure timely and accurate dissemination of security-related information to the executives.
- d. The Executive Protection Team shall provide comprehensive training and education programs to enhance the personal security awareness and preparedness of our executives.
- e. The Executive Protection Team shall coordinate with external security agencies and stakeholders, as necessary, to enhance the effectiveness of our executive protection measures.

3. Responsibilities:

This mandate applies to all executives within our organization, including the CEO, members of the Board of Directors, and other key executives deemed to be at risk.

4. Security Measures:

- a. Physical Security: Implement robust access control measures, surveillance systems, and physical barriers to protect executive offices, residences, and other designated areas.
- b. Threat Assessment and Intelligence: Continuously monitor and analyze potential threats, both internal and external, and provide timely intelligence reports to the Executive Protection Team.
- c. Executive Travel Security: Develop comprehensive travel security protocols, including pre-travel risk assessments, secure transportation arrangements, and local security support at destinations.
- d. Cybersecurity: Collaborate with the IT department to establish and maintain robust cybersecurity measures to protect executive information and communication systems.
- e. Emergency Response: Develop and regularly update emergency response plans, including procedures for evacuations, medical emergencies, natural disasters, and other crisis situations.

5. Reporting and Review:

The Executive Protection Team shall provide regular reports to the Board of Directors on the status of executive protection measures, including any significant incidents, threats, or changes in the risk landscape. The Board shall review and evaluate the effectiveness of the executive protection program on an annual basis.

6. Compliance:

All executives are expected to fully comply with the executive protection measures, protocols, and procedures established by the Executive Protection Team.

7. Resources:

Adequate resources, including budgetary allocations, shall be provided to support the implementation of executive protection initiatives.

This Board Mandate for Executive Protection is effective immediately and shall remain in effect until further notice. The safety and security of our executives are of paramount importance, and we trust that the Executive Protection Team will diligently fulfill their responsibilities in accordance with this mandate.

Thank you for your attention and commitment to ensuring the well-being of our executives.

Sincerely,

Table OA.1: **Workforce Reductions**
Security Expenses

Panel A: All Layoffs with Negative News Sentiment

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$			
$ceo_chair_{i(t-1)}$	0.530*** (0.156)	0.252* (0.145)	0.594*** (0.146)	0.286** (0.144)	0.309* (0.173)	0.266 (0.162)
$\ln(tenure)_{ijt}$	0.199*** (0.071)	0.238*** (0.065)	0.198** (0.078)	0.233*** (0.075)	0.369*** (0.070)	0.287*** (0.064)
$founder_{ij}$	0.517* (0.303)	-0.102 (0.654)	0.262 (0.376)	-0.536 (0.780)	0.136 (0.395)	-0.457 (0.604)
$\ln(wiki_edits)_{ij(t-1)}$	0.231*** (0.058)	0.243*** (0.056)	0.302*** (0.062)	0.184*** (0.060)	0.091 (0.064)	0.188*** (0.060)
$layoff_i(t+1)$	0.111 (0.100)	0.126 (0.083)	0.040 (0.115)	0.060 (0.107)	0.174 (0.113)	0.116 (0.095)
$layoff_{it}$	0.028 (0.090)	0.033 (0.081)	0.004 (0.096)	0.005 (0.088)	0.130 (0.096)	0.083 (0.090)
$layoff_i(t-1)$	0.010 (0.098)	0.019 (0.081)	0.017 (0.102)	0.006 (0.097)	0.049 (0.102)	0.034 (0.084)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. R^2	0.358	0.619	0.337	0.539	0.313	0.583
adj. within- R^2	0.168	0.076	0.164	0.083	0.094	0.068
N	4,830	4,830	3,280	3,280	3,771	3,771

Panel B: Layoffs with Pronounced Negative News Sentiment

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$			
$ceo_chair_{i(t-1)}$	0.533*** (0.155)	0.254* (0.145)	0.594*** (0.146)	0.283** (0.143)	0.315* (0.172)	0.268* (0.162)
$\ln(tenure)_{ijt}$	0.197*** (0.071)	0.237*** (0.065)	0.199** (0.078)	0.234*** (0.075)	0.363*** (0.070)	0.283*** (0.063)
$founder_{ij}$	0.522* (0.303)	-0.105 (0.657)	0.255 (0.377)	-0.541 (0.782)	0.139 (0.394)	-0.457 (0.604)
$\ln(wiki_edits)_{ij(t-1)}$	0.232*** (0.058)	0.244*** (0.056)	0.302*** (0.062)	0.184*** (0.059)	0.094 (0.063)	0.190*** (0.060)
$major_layoff_{i(t+1)}$	0.294*** (0.112)	0.190* (0.106)	0.085 (0.144)	0.085 (0.143)	0.371*** (0.114)	0.234** (0.109)
$major_layoff_{it}$	0.074 (0.102)	0.009 (0.098)	-0.042 (0.121)	-0.044 (0.116)	0.155 (0.116)	0.067 (0.109)
$major_layoff_{i(t-1)}$	0.081 (0.108)	0.002 (0.090)	-0.075 (0.121)	-0.056 (0.112)	0.161 (0.111)	0.012 (0.096)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. R^2	0.359	0.620	0.337	0.539	0.315	0.584
adj. within- R^2	0.169	0.076	0.164	0.083	0.096	0.069
N	4,830	4,830	3,280	3,280	3,771	3,771

Notes: The table displays the regression results for the analysis of security expenses and workforce reductions that we identify as announcements of layoffs or similar events with negative news sentiment around the announcement date in Panel A, and as the subset with below-median negative news sentiment in Panel B. The samples include the years 2006–2023 in both panels; they are subsamples of the sample displayed in Table 6 including only firms that report in at least one sample year security expenses greater than zero. i denotes firm, j CEO spell, and t fiscal year. $layoff_{fit}$ is an indicator variable equal to one if the firm announces at least one layoff or similar event with negative news sentiment in the seven-day period centered on the announcement date during the fiscal year. $major_layoff_{it}$ is an indicator variable equal to one if the firm announces at least one layoff or similar event with below-median negative news sentiment in the seven-day period centered on the announcement date during the fiscal year. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under FIRM CHARACTERISTICS [listed in Equation 1] and CONTROLS [$return_{i(t-1)}$, $sales_growth_{i(t-1)}$, $roa_{i(t-1)}$, and $lev_{i(t-1)}$]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table OA.2: **CEO Visibility**
Security Expenses

Panel A: **WSJ Coverage of CEO and Firm**

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$			
$ceo_chair_{i(t-1)}$	0.808*** (0.168)	0.410** (0.168)	0.829*** (0.154)	0.486*** (0.167)	0.497*** (0.190)	0.392** (0.193)
$\ln(tenure)_{ijt}$	0.057 (0.097)	0.143 (0.092)	0.102 (0.103)	0.146 (0.104)	0.287*** (0.097)	0.206** (0.093)
$founder_{ij}$	0.615* (0.323)	-0.374 (0.631)	0.461 (0.380)	-0.684 (0.757)	0.097 (0.420)	-0.591 (0.642)
$\ln(wiki_edits)_{ij(t-1)}$	0.225*** (0.059)	0.223*** (0.059)	0.278*** (0.059)	0.147** (0.062)	0.110* (0.067)	0.170** (0.066)
$\ln(wsj_ceo)_{ij(t-1)}$	0.000 (0.143)	0.034 (0.105)	0.273* (0.145)	0.035 (0.112)	-0.336** (0.156)	-0.097 (0.116)
$\ln(wsj_firm)_{i(t-1)}$	-0.001 (0.068)	-0.049 (0.050)	-0.037 (0.066)	-0.021 (0.049)	0.052 (0.072)	-0.046 (0.059)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. R^2	0.342	0.618	0.334	0.552	0.303	0.570
adj. within- R^2	0.159	0.067	0.167	0.083	0.087	0.055
N	4,731	4,731	3,266	3,266	3,640	3,640

Panel B: Secular Visibility

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$			
$ceo_chair_{i(t-1)}$	0.512*** (0.194)	-0.061 (0.200)	0.512** (0.207)	0.293 (0.230)	0.164 (0.200)	-0.149 (0.247)
$\ln(tenure)_{ijt}$	0.162 (0.103)	0.243** (0.103)	0.188 (0.114)	0.075 (0.124)	0.473*** (0.113)	0.373*** (0.123)
$founder_{ij}$	0.849** (0.403)	-0.111 (1.010)	0.770 (0.505)	-0.283 (0.998)	0.267 (0.520)	-1.675 (1.170)
$\ln(wiki_views)_{ij(t-1)}$	0.071*** (0.021)	0.067*** (0.026)	0.120*** (0.023)	0.123*** (0.030)	0.017 (0.024)	0.024 (0.029)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. R^2	0.319	0.622	0.344	0.537	0.285	0.548
adj. within- R^2	0.148	0.058	0.169	0.072	0.083	0.042
N	2,013	2,013	1,341	1,341	1,517	1,517

Notes: The table displays the regression results for the additional analysis of security expenses and CEO visibility, with a focus on Wall Street Journal coverage in Panel A and secular visibility in Panel B. The samples include the years 2006–2018 in Panel A and 2017–2024 in Panel B; they are subsamples of the samples displayed in Table 7 including only firms that report in at least one sample year security expenses greater than zero. i denotes firm, j CEO spell, and t fiscal year. $\ln(wsj_ceo)_{ij(t-1)}$ is the natural logarithm of one plus the number of articles in the Wall Street Journal related to the CEO during the fiscal year. $\ln(wsj_firm)_{i(t-1)}$ is the natural logarithm of one plus the number of articles in the Wall Street Journal related to the firm during the fiscal year. $\ln(wiki_views)_{ij(t-1)}$ is the natural logarithm of one plus the number of page views on the CEO's Wikipedia page. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under FIRM CHARACTERISTICS [listed in Equation 1] and CONTROLS [$return_{i(t-1)}$, $sales_growth_{i(t-1)}$, $roa_{i(t-1)}$, and $lev_{i(t-1)}$]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table OA.3: **Reputation Effects**
Security Expenses

Panel A: **ESG Risk and SEC Investigations**

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$			
$ceo_chair_{i(t-1)}$	0.406** (0.201)	0.115 (0.186)	0.607*** (0.215)	0.198 (0.213)	0.283 (0.226)	0.241 (0.206)
$\ln(tenure)_{ijt}$	0.329*** (0.102)	0.380*** (0.096)	0.390*** (0.126)	0.406*** (0.114)	0.515*** (0.101)	0.455*** (0.099)
$founder_{ij}$	0.415 (0.386)	0.823 (0.898)	0.681 (0.535)	0.784 (1.364)	0.283 (0.515)	0.525 (0.893)
$\ln(wiki_edits)_{ij(t-1)}$	0.252*** (0.074)	0.190** (0.078)	0.244*** (0.087)	0.060 (0.077)	0.086 (0.075)	0.183** (0.077)
$esg_risk_{i(t-1)}$	0.115 (0.838)	0.007 (0.642)	-1.192 (1.049)	-1.061 (0.724)	0.201 (0.955)	1.063 (0.853)
$sec_inv_{i(t-1)}$	0.018 (0.156)	-0.078 (0.131)	0.228 (0.173)	0.026 (0.130)	0.037 (0.177)	-0.140 (0.162)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. R^2	0.413	0.658	0.392	0.633	0.363	0.583
adj. within- R^2	0.186	0.086	0.197	0.108	0.105	0.097
N	2,176	2,176	1,349	1,349	1,543	1,543

Panel B: Excess Compensation

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$			
$ceo_chair_{i(t-1)}$	0.660*** (0.171)	0.305* (0.180)	0.756*** (0.163)	0.482*** (0.180)	0.392* (0.201)	0.303 (0.219)
$\ln(tenure)_{ijt}$	0.055 (0.106)	0.128 (0.102)	0.178 (0.116)	0.139 (0.114)	0.293** (0.113)	0.215* (0.111)
$founder_{ij}$	0.490 (0.358)	0.037 (0.752)	-0.270 (0.443)	-0.191 (0.799)	0.170 (0.487)	-0.273 (0.934)
$\ln(wiki_edits)_{ij(t-1)}$	0.196*** (0.060)	0.181*** (0.062)	0.282*** (0.068)	0.125* (0.067)	0.091 (0.064)	0.176*** (0.068)
$res(comp)_{ij(t-1)}$	0.238 (0.188)	0.063 (0.160)	0.298* (0.180)	0.203 (0.156)	0.107 (0.225)	-0.003 (0.194)
$pay_gap_{ij(t-1)}$	0.375*** (0.129)	0.166 (0.103)	0.150 (0.133)	0.037 (0.109)	0.402** (0.156)	0.196 (0.125)
$ownership_{ij(t-1)}$	0.042 (0.045)	-0.009 (0.048)	0.066 (0.059)	-0.020 (0.052)	-0.004 (0.063)	0.004 (0.052)
FIRM CHARACTERISTICS	yes	yes	yes	yes	yes	yes
CONTROLS	yes	yes	yes	yes	yes	yes
Fixed effects						
Fiscal year	yes	yes	yes	yes	yes	yes
Industry and state	yes	no	yes	no	yes	no
Firm	no	yes	no	yes	no	yes
adj. R^2	0.358	0.627	0.331	0.551	0.323	0.578
adj. within- R^2	0.169	0.058	0.155	0.072	0.104	0.060
N	3,871	3,871	2,665	2,665	2,966	2,966

Notes: The table displays the regression results for the additional analysis of security expenses and reputation effects, for ESG risk and SEC investigations in Panel A and measures of excess compensation in Panel B. The samples include the years 2008–2018 in Panel A and 2007–2024 in Panel B; they are subsamples of the samples displayed in Table 8 including only firms that report in at least one sample year security expenses greater than zero. i denotes firm, j CEO spell, and t fiscal year. $esg_risk_{i(t-1)}$ is risk exposure to ESG issues, computed as the average of the daily values of the RepRisk Index throughout the firm's fiscal year. $sec_inv_{i(t-1)}$ is an indicator variable equal to one if the firm is subject to at least one opened, closed, or ongoing SEC investigation. $res(comp)_{ij(t-1)}$ is the residual from a regression of the natural logarithm of total compensation excluding security expenses on compensation determinants. $pay_gap_{ij(t-1)}$ is the natural logarithm of the difference between the compensation of the CEO and the median compensation of the next four highest-paid executives, where compensation corresponds to total compensation less other compensation. $ownership_{ij(t-1)}$ is the percentage of company stock held by the CEO. Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under FIRM CHARACTERISTICS [listed in Equation 1] and CONTROLS [$return_{i(t-1)}$, $sales_growth_{i(t-1)}$, $roa_{i(t-1)}$, and $lev_{i(t-1)}$]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.

Table OA.4: Selected Industries

Main Model

Panel A: Security Policies

	<i>any_sec_{ijt}</i>	<i>home_sec_{ijt}</i>	<i>air_sec_{ijt}</i>
<i>entertainment</i>	0.086 (0.097)	0.011 (0.093)	0.209** (0.106)
<i>chemicals</i>	0.041 (0.063)	0.030 (0.050)	0.073 (0.065)
<i>defense/aircraft</i>	0.082 (0.090)	0.126 (0.090)	0.148 (0.097)
<i>mining</i>	-0.079 (0.176)	-0.007 (0.188)	-0.031 (0.186)
<i>energy</i>	0.006 (0.070)	0.049 (0.056)	0.063 (0.067)
<i>tech/software</i>	0.014 (0.052)	0.054 (0.039)	0.037 (0.052)
<i>tech/hardware</i>	0.021 (0.048)	0.039 (0.042)	0.035 (0.047)
CEO CHARACTERISTICS	yes	yes	yes
FIRM CHARACTERISTICS	yes	yes	yes
CONTROLS	yes	yes	yes
Fixed effects			
Fiscal year	yes	yes	yes
State	yes	yes	yes
adj. <i>R</i> ²	0.312	0.275	0.261
N	10,317	10,317	10,317

Panel B: Security Expenses

	$\ln(sec_exp)_{ijt}$	$\ln(home_sec_exp)_{ijt}$	$\ln(air_sec_exp)_{ijt}$
<i>entertainment</i>	-0.020 (0.595)	-0.769 (0.482)	0.152 (0.547)
<i>chemicals</i>	0.053 (0.376)	-0.311 (0.375)	-0.084 (0.415)
<i>defense/aircraft</i>	0.755 (0.702)	0.380 (0.430)	0.700 (0.642)
<i>mining</i>	4.665*** (0.671)	3.850*** (0.519)	3.681*** (0.708)
<i>energy</i>	0.919*** (0.345)	0.623** (0.282)	0.783* (0.431)
<i>tech/software</i>	-0.264 (0.322)	-0.145 (0.322)	-0.107 (0.388)
<i>tech/hardware</i>	-0.204 (0.369)	-0.219 (0.413)	0.099 (0.434)
CEO CHARACTERISTICS	yes	yes	yes
FIRM CHARACTERISTICS	yes	yes	yes
CONTROLS	yes	yes	yes
Fixed effects			
Fiscal year	yes	yes	yes
State	yes	yes	yes
adj. R^2	0.299	0.293	0.239
N	5,364	3,731	4,131

Notes: The table displays the regression results for the main analysis of security policies and expenses, with indicator variables for selected industries instead of industry fixed effects. Panel A displays the results for security policies and Panel B for security expenses. The sample includes 664 firms and the years 2006–2024 in Panel A; the samples in Panel B are subsamples thereof including only firms that report in at least one sample year security expenses greater than zero. i denotes firm, j CEO spell, and t fiscal year. any_sec_{ijt} is an indicator variable equal to one if the firm reports home, car, or air personal security. $home_sec_{ijt}$ is an indicator variable equal to one if the firm reports home personal security expenses greater than zero, or otherwise mentions that home security is provided. air_sec_{ijt} is an indicator variable equal to one if the firm reports expenses greater than zero for use of company aircraft for security purposes, or otherwise mentions that company aircraft use is required, encouraged, or allowed when security concerns are present. $\ln(sec_exp)_{ijt}$ is the natural logarithm of one plus total personal security expenses, i.e., the sum of home, car, and air security expenses. $\ln(home_sec_exp)_{ijt}$ is the natural logarithm of one plus home personal security expenses. $\ln(air_sec_exp)_{ijt}$ is the natural logarithm of one plus expenses for use of the company aircraft for security purposes. Variables for selected industries follow the Fama and French 48-industries classification (FF48). *entertainment* is an indicator variable equal to one for the industries (FF48 code in parentheses) beer & liquor (4), tobacco products (5), and entertainment (7). *chemicals* is an indicator variable equal to one for pharmaceutical products (13) and chemicals (14). *defense/aircraft* is an indicator variable equal to one for aircraft (24) and defense (26). *mining* is an indicator variable equal to one for precious metals (27) and non-metallic and industrial metal mining (28). *energy* is an indicator variable equal to one for coal (29) and petroleum and natural gas (30). *tech/software* is an indicator variable equal to one for business services (34). *tech/hardware* is an indicator variable equal to one for computers (35) and electronic equipment (36). Appendix A.1 provides definitions of the remaining variables, including the variables subsumed under FIRM CHARACTERISTICS and FIRM CHARACTERISTICS [listed in Equation 1], as well as CONTROLS [$return_{i(t-1)}$, $sales_growth_{i(t-1)}$, $roa_{i(t-1)}$, and $lev_{i(t-1)}$]. Standard errors are clustered by firm and denoted below the coefficients in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 level, respectively.