# When There's A Cap on SEC Pay, Firms Will Play With Their ROA

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#### Abstract

We document that firms engage in opportunistic short-term ROA enhancing when they conduct business in an environment with a low probability of detection of financial misconduct. To proxy for a lax monitoring environment, we compute the percentage of local Securities and Exchange Commission (SEC) employees earning the exogenously imposed maximum salary, as these employees lack the monetary incentives to increase their monitoring efforts. We find that the percentage of local SEC employees at the salary cap correlates negatively with the detection rate of financial misconduct, and positively with the attrition rate of SEC employees. We also show that in environments with apparent lax SEC monitoring, firms engage in short-term ROA enhancements, principally by increasing their discretionary accruals, and the magnitude of the effect increases when peers of the focal firms also engage in financial misconduct.

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#### 1. Introduction

On July 19, 2023, Securities and Exchange Commission (SEC) Chairman Gary Gensler asked the U.S. Congress for an increase in the SEC budget for the following fiscal year, citing the urgent need to increase the number of examiners and enforcement officers.<sup>1</sup> However, even with the approval of the budget increase, when federal salaries lag their private-sector equivalents by 22%<sup>2</sup> a legitimate question is whether SEC employees have the adequate incentives to closely monitor the behavior of public firms, and detect financial misconduct such as profitability enhancing. Or more pithily, when there's a cap on SEC pay, do firms play with their ROA?

In this paper, we examine the economic consequences of doing business in an environment where the probability of financial misconduct detection temporarily decreases. We contribute to the debate related to the importance of monitors external to the firm by showing that in the cross-section, areas where SEC employees are not provided with the correct incentives to maintain high-quality monitoring efforts are also areas where firms engage in short-term, artificial ROA enhancing. Our paper therefore adds to our comprehension of the causes of value-destroying financial misconduct (see, for example, Cumming et al. 2015 for a review article on financial misconduct).

There are two competing hypotheses about the productivity of public servants (e.g., Lee 2012). Under the pay-for-performance hypothesis, SEC employees increase their financial misconduct detection efforts as their extrinsic, monetary compensation increases. Under the public service hypothesis, SEC employees' detection efforts are primarily dictated by an intrinsic desire

<sup>&</sup>lt;sup>1</sup> <u>https://www.sec.gov/news/testimony/gensler-testimony-fsgg-subcommittee-appropriations-committee-071923</u>, last accessed August 29, 2023.

<sup>&</sup>lt;sup>2</sup> Yoder, E. Federal salaries lag 22.5 percent behind private sector, report finds. Washington Post, August 5, 2022. <u>https://www.washingtonpost.com/politics/2022/08/05/federal-salaries-pay-gap-private-sector/</u>, last accessed August 29, 2023.

to create social value and serve the public, and should therefore be unrelated to compensation, especially at higher levels. To disentangle these competing hypotheses, we use the exogenously imposed upper limit on compensation for SEC employees to identify whether pay or intrinsic motivation drives employee productivity.

More specifically, every year, the SEC sets a maximum salary its employees may earn. This salary cap is exogenously determined by political factors, such as the SEC's budget or political decrees<sup>3</sup>, and is not related to employees' tenure, skill, or performance. The salary constraint is binding and affects between 5% and 9% of non-officer SEC employees. If employees at the salary cap are primarily motivated by monetary incentives, they may curb (or at least not increase) their efforts in detecting financial misconduct in local firms. Alternatively, these employees may leave the public sector for the better paid private sector, leaving the SEC in a precarious position to detect and enforce financial misconduct. We hypothesize that at the salary cap, the pay-for-performance hypothesis dominates the public service hypothesis and we should observe a negative correlation between the percentage of SEC employees earning the maximum salary in a given geographic area, and the number of detected cases of financial misconduct in the same area.

We collect publicly available data on SEC employees' compensation, location, and pay grade from GovSalaries.com. We use salary data to calculate the standardized percentage of non-officer<sup>4</sup> SEC employees earning the maximum salary (*Perc\_at\_Cap*) within 100 miles of each federal information processing standard (FIPS, which capture geographical location in areas approximately similar to counties). We correlate this percentage with several geographicallyspecific proxies for financial misconduct, including the occurrence of accounting restatements

<sup>&</sup>lt;sup>3</sup> For example, the Trump administration demanded a public sector pay freeze in 2018 <u>https://www.washingtonpost.com/news/powerpost/wp/2018/05/10/trumps-aides-defend-pay-freeze-and-retirement-cuts-but-raise-questions/</u> last accessed August 30, 2023.

<sup>&</sup>lt;sup>4</sup> Senior SEC Officers are subject to a slightly higher pay cap.

(petitioned by the SEC or not), accounting and auditing enforcement releases (AAER), and SEC comment letters in the local area.

We document a robust negative correlation between the percentage of SEC employees whose salary is capped and the local rate of financial misconduct detection, suggesting that at the margin, SEC employees require more than intrinsic motivation for public service to increase their monitoring efforts. This aligns with Lee's (2012) findings that monetary rewards motivate employees in a pay-for-performance pay scheme only when large enough. We also find a positive correlation with the percentage of SEC employees earning the maximum salary and the number of employees leaving the SEC, which reinforces our interpretation that the pay-for-performance dominates the public service hypothesis. In addition, we find evidence that financial misconduct is contextual, rather than a firm- or time-fixed effect. Altogether, our tests validate *Perc\_at\_Cap* as an exogenously determined proxy to sort geographic areas into higher or lower enforcement regions over time.

Sorting local environments according to the probability of financial misconduct detection allows us to examine firms' behavior when the incentives to intense enforcement are exogenously weakened. We hypothesize that firms observe signals about the reduced likelihood of detection, and respond by enhancing their ROA in the short-term. We test this prediction by estimating regressions of firm-level ROA on the local *Perc\_at\_Cap*. Consistent with our hypothesis, we find a positive relation between *Perc\_at\_Cap* and ROA, and the effect is economically significant.

Our identification strategy rests on different tests. First and foremost, the pay cap (which proxies monitoring effectiveness) is exogenously determined by national politics. Consequently, it is unlikely that the pay cap is responding to local issues or correlates with employees' past performance or skills. Furthermore, the pay cap varies across time and geographic areas, providing enough variation to identify its impact. We also use a large array of fixed effects to control for

unobservable characteristics, and we assess the robustness of our results to the omitted variables bias using Oster's (2019) methodology.

To examine more precisely whether the increase in ROA is likely due to firms taking advantage of the lax environment to engage in financial misconduct, we regress firms' ROA on an indicator variable that equals 1 if the firm commits financial misconduct, *Perc\_at\_Cap*, and the interaction of the two terms. The interaction term is positive and significant when financial misconduct is defined as restatements due to fraud or high accruals, which suggests that firms that need to restate their accounting statements due to fraud may have manipulated their discretionary accruals to artificially increase their ROA.

In contrast, the interaction term of various SEC enforcement metrics (SEC investigated restatements, AAERs, and comment letters) and *Perc\_at\_Cap* shows no increase. There seems to be evidence that private enforcement substitutes to the SEC when the SEC's monitoring efforts are not optimal. Indeed, we find increased securities class action suits in these areas. However, it is an imperfect substitution at best, as shareholders do not systematically step in to replace less intensive SEC monitoring.

We also consider the influence of peers on focal firms' behavior. The literature has documented contagion effects in unethical behavior (e.g., Gino et al. 2009, Dimmock et al. 2018, Easley and O'Hara 2023). Therefore, we expect firms to engage in more ROA enhancing if peers commit financial misconduct. We split our sample into firms whose geographic peers engage in financial misconduct, and those whose peers have not been identified as committing financial misconduct. Consistent with the literature, we find that the positive relation between ROA and *Perc\_at\_Cap* exists only for firms whose peers commit financial misconduct, suggesting that short-term ROA enhancing is circumstantial. If focal firms observe peer firms committing misconduct and going unpunished, the focal firms are more likely to commit misconduct themselves.

Lastly, we document that the positive relation between *Perc\_at\_Cap* and ROA holds only in the subsample of non-financially distressed firms. The SEC uses firms' financial distress as a signal to decide which firms to investigate. Firms at risk of being closely monitored therefore do not attempt to take advantage of the generally lax local environment, because they know they face higher detection probabilities than non-distressed but otherwise comparable firms. This supports our hypothesis that firms behave opportunistically when enforcement is lower.

Our contributions to the literature are multifold. We first contribute to the literature that examines the determinants of corporate and financial misconduct. A large portion of this literature, however, considers that a firms' propensity to financial misconduct is essentially time- or CEO-invariant. For example, Gerety and Lehn (1997) find that the likelihood of being charged by the SEC is unrelated to the quality of the firm's corporate governance, which is largely static. Similarly, Biggerstaff et al. (2015), Liu (2016) and Banerjee et al. (2018) find that firms with unethical or overconfident CEOs are more likely to engage in financial misconduct, while Johnson et al. (2009) document that CEOs earning higher proportions of unrestricted stockholdings are also more likely to commit financial misconduct.

In contrast, we document that financial misconduct is opportunistic, as it varies with time and across geographic areas. Firms engage in apparent short-term ROA enhancing when the probability of detection by SEC employees is low, and when peer firms also commit financial misconduct. Therefore, firms are not inherently (un)ethical, but rather, firms appear to be opportunistic depending on circumstances, as they take advantage of a temporary lax situation, monitoring-wise. Our paper is closest to Kedia and Rajgopal (2011), who document that geographical proximity to SEC offices correlates negatively with the prevalence of financial misconduct, among others because firms perceive that being physically close to SEC offices increases the probability of investigation. Alternatively, Gunny and Hermis (2020) document that SEC busyness impacts the frequency, and timeliness of the comment letters it issues, but that even during busy periods, the SEC does not target "easier" cases.

While we also find that geographical proximity matters, we add a time-varying dimension to the monitoring intensity. Indeed, we argue that monitoring intensity varies with the percentage of SEC employees earning the maximum salary, thus lacking monetary incentives to deploy additional monitoring effort. That proportion varies both geographically and yearly, which provides us with a rich proxy of the intensity of regulatory monitoring in a given geographical area.

We also contribute to the pay and incentives literature. Although this literature is rich (e.g., Gabaix and Landier 2008; Frydman and Jenter 2010; Edmans Gabaix, and Jenter 2017), there are relatively few papers on the incentives for public sector employees. Delfgaauw and Dur (2010) and Jaimovich and Rud (2014) both propose theoretical models predicting whether employees sort into the private or public sectors, using skills or motivation (monetary or intrinsic) as determinants. Lee (2012) shows that employees who self-select into pay-for-performance pay structures are motivated by extrinsic factors, whereas employees under a general pay structure are more motivated by intrinsic factors. We empirically test whether SEC employees' productivity in detecting financial misconduct cases decreases when there is an exogenous cap on the monetary incentives they can aspire to.

Finally, our research has significant policy implications. Our tests contribute to the public debate about the adequate salary of public employees and the budget allocation to the SEC and, by extension, other government agencies. We show that compensation is an important determinant of the SEC's enforcement effectiveness.

## 2. Literature Review and Hypotheses Development

#### 2.1. Who Detects Financial Misconduct?

Markets have two non-mutually exclusive ways of enforcing proper disclosure of information: Private enforcement, such as litigation, reputation, or governance structures, or public enforcement, such as regulatory agencies. While private enforcement has a large role to play, the bulk of the burden, particularly for smaller firms and firms with greater information asymmetry, falls upon regulators like the United States' Securities and Exchange Commission's (SEC). The SEC's mandate is to ensure the functioning of financial markets, which includes the verification that disclosed financial information is timely, accurate, and complete. A non-ambiguous violation of the principle of timely, accurate and complete financial information arises when firms engage in financial misconduct, which, for obvious reasons, they do not disclose. The detection rate of financial misconduct could therefore be interpreted as the efficiency of the SEC in fulfilling its mission.

Even though Dyck et al. (2010) show that the SEC accounts for only a small portion of detected financial misconduct cases (approximately 5% of known financial misconduct cases in the pre-SOX era, and about 10% in the post-SOX period), its economic significance is undisputed. In fact, Cumming and Johan (2013) report that the SEC investigates between 2% and 5% of listed firms; if the SEC targets the most impactful cases in the post-SOX period, and those cases are high-visibility, complex cases, then the central role of the SEC as financial market monitor is undeniable. For these reasons, and because securities class actions appear to complement SEC investigations, we focus on the SEC's role.

### 2.2. What Are the Firm-Level Consequences of Poor Monitoring?

The possible consequences of poor monitoring are multiple and varied. In this paper, we focus on financial misconduct, which is broad in scope, and includes, among others, insider trading, accounting fraud and dissemination of false information (Cumming et al. 2015). While the literature examines the long-term consequences such as lost reputation (e.g., Fich and Shivdasani 2007, Yuan and Zhang 2016), difficulties in obtaining new financing (Yuan and Zhang 2016) or sharp declines in stock prices (e.g., Bardos et al. 2011, Cooper et al. 2013, Lel et al. 2022), we focus on the immediate consequences of financial misconduct. Indeed, if enforcement incentives vary through time, it is rational for firms to take advantage of temporary conditions favorable to financial misconduct to engage in misconduct with immediate impact. As Becker (1968) proposes, a rational agent should engage in criminal activities if the expected benefits of crime exceed tis expected costs. We recognize three mutually exclusive scenarios. First, if people involved in misconduct appropriate all misconduct benefits (e.g., Amiram et al. 2020), there should be no noticeable short-term impact on firm-level metrics, such as an increase in performance.

However, firms could acknowledge the lower probability of detection (and hence, lower probability of punishment), and take advantage of this lax environment to engage in financial misconduct (Wright et al. 2004). Such opportunistic behavior should enhance short-term firm performance, either through overly aggressive treatment of accruals, optimistic recognition of revenues, or over-conservatism in computing eventual costs, to name a few possibilities.

For instance, Kedia and Philippon (2007) propose a theoretical model in which during periods of suspicious accounting, firms report high profits to pool with profitable high-productivity firms, and because managers want to engage in insider trading. Such misrepresentation is however not sustainable over the long term. In fact, the vast majority of the literature finds that investors "punish" firms exposed as having committed fraud or financial misconduct, and the negative

reaction upon revelation of misconduct is typically much larger than the potential direct monetary gain from misreporting financial information (e.g., Dechow et al. 1996, Bardos et al. 2011, Cooper et al. 2013).

Alternatively, if other stakeholders substitute for deficient SEC monitoring, the impact on firms could be null. For instance, a quasi-complete separation of financial investigators according to the suspected misconduct issue could imply that seemingly poor SEC monitoring arises when the suspected issue is not under the SEC's responsibility, but rather under that of another stakeholder. For instance, Lel et al. (2022) show an increase in mutual funds outflows in the year following the detection of corporate misconduct by one of the mutual fund's portfolio firms, providing evidence that investors attribute monitoring responsibilities to fund managers, even when the main regulator failed to detect misconduct. If firms anticipate this shifting of investigating responsibilities, the threat of detection remains constant, which should curb, or at least not increase, firms' propensity to engage in financial misconduct. The resulting impact on firm performance should therefore be non-existent.

The above discussion leads to the following pair of contrasting hypotheses:

H1a: When SEC monitoring is poor, firms engage in ROA-increasing financial misconduct. H1b: When SEC monitoring is poor, other stakeholders substitute for the SEC, and there is no impact on firm profitability.

A corollary of the above pair of hypotheses, is that the focal firm is not uniquely affected by the quality of the monitoring environment. Indeed, the focal firm's peers should also observe the environment's characteristics, and reach similar conclusions regarding the likelihood of financial misconduct detection. For instance, Kedia and Philippon's (2007) model account for periods of more suspicious accounting. Similarly, in Easley and O'Hara's (2023) model, agents play a psychological game, observing the (un)ethical behavior of their peers and selecting the adequate behavioral response. Such imitation behavior results in contagion effects. In fact, Parsons et al. (2018) show that the probability of financial misconduct correlates with local unethical behavior, consistent with the idea that firm managers imitate the local customs. Moreover, if peer firms engage in financial misconduct and remain undetected, focal firms' incentives to imitate their peers and also engage in financial misconduct should be higher, which should lead to more misconduct overall.

#### 2.3. Is the SEC Salary Cap Indicative of Its Effectiveness in Detecting Financial Misconduct?

In light of the significant economic consequences to financial misconduct, and because of the SEC's central role as the regulator of financial markets, our proxy for local environments favorable to conduct financial misconduct is the local SEC's effectiveness in detecting financial misconduct. More specifically, we use an exogenously imposed limit on the compensation of SEC employees as well as incentives theory to differentiate highly intensive monitoring environments from other local environments with less likely to present intensive detection of financial misconduct

Classic economic theory postulates that agents endogenously choose their effort level in order to maximize their own value function. While value functions are not observable, the endogenously chosen effort level is assumed to increase with agents' motivation. We rely on the literature to examine the potential motivators of employees of the public sector, and we use the SEC's pay structure to differentiate the competing theories.

The traditional view in the finance and economics literature is that adequate monetary incentives align the interests of the economic agent with those of the principal. In their review articles, Gabaix and Landier (2008), Frydman and Jenter (2010) and Edmans Gabaix, and Jenter (2017) argue that an incentivizing contract should offer compensation proportional to the added

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value, independent of whether the agent is a rank-and-file employee or a CEO. In the pay-forperformance framework, salary correlates positively with both effort and skill; we should therefore expect more effective monitoring efforts from SEC regional offices where more employees receive higher salaries.

Bizjak et al. (2008) shows that agents are motivated by pay, relative to that of their peers. Similarly, Card et al. (2012) present evidence that comparison with peers' salaries affects job satisfaction, which in turn is a large driver of productivity. Because in most local labor markets, the SEC competes with the lucrative private sector for attracting employees skilled at detecting financial misconduct, we expect SEC employees to compare their salary to their peers from the private sector. Although the pay-for-performance scheme advocates for a pay structure increasing in effort or, in our case, monitoring effectiveness, in practice, the SEC's resources are constrained. In fact, the SEC compensation structure imposes a maximal salary. If this constraint is binding, skilled employees motivated by monetary incentives may be tempted to switch to the private sector. Therefore, if monetary incentives are the predominant motivational force driving SEC employees' monitoring effort, we should observe an increase in SEC employee turnover when the maximal salary is binding.

On the other hand, pay is not the only motivational factor that drives employees' chosen effort—intrinsic or reputational factors could also determine which job agents select, and their chosen effort level. For example, the Best Places to Work Institute ranked the SEC third among federal agencies in both 2022 and 2021.<sup>5</sup> In turn, Jaimovich and Rud (2014) develop a theoretical model that results in an equilibrium in which only public-service motivated agents self-select into the public sector, suggesting that public sector employees' value function may depend on both

<sup>&</sup>lt;sup>5</sup> <u>https://bestplacestowork.org/rankings/?view=overall&size=mid&category=leadership&</u> (last accessed June 21, 2023).

monetary incentives and intrinsic motivation. However, Delfgaauw and Dur's model (2010) develops a separating equilibrium in which high-ability people self-select into the better-paying private sector jobs, leaving the public sector crowded with low-ability employees, with or without high public service motivation. In short, intrinsic public service motivation may substitute for pay in incentivizing public sector employees, and it is therefore not obvious ex ante that augmenting SEC employees' salary will result in an increased effort.

To disentangle the pay-for-performance from the public-service motivation hypotheses, and thus quantify the intensity of local monitoring, we use a specificity of the observed SEC compensation plan. Indeed, the SEC pay structure is not linear, as the SEC imposes a cap on the maximum salary its employees may receive.<sup>6</sup> More importantly, this cap is exogenously imposed, and does not correlate with any individual's effort, skills or complexity of the cases under study. The existence of this imposed salary limit may result in distorted incentives at the cap, if intrinsic public service motivation is not the dominating driving force of effort at that salary level. Indeed, as employees reach their maximal salary, the marginal motivation they extract from this maximal salary erodes through time, which may in turn lead to decreased monitoring efforts. If so, we expect the number of SEC employees earning the maximum salary to negatively correlate with local financial misconduct detection. This discussion leads to the following pair of hypotheses:

H2a (Pay-for-performance hypothesis): SEC effectiveness decreases with the number of SEC employees receiving the maximal salary.

H2b (Public service hypothesis): SEC effectiveness is unaffected with the number of SEC employees receiving the maximal salary.

<sup>&</sup>lt;sup>6</sup> <u>https://www.sec.gov/about/careers/sec-compensation</u>, last accessed June 15, 2023.

Importantly, our objective with the above hypotheses is strictly to differentiate, in the crosssection, local environments with a high probability of detection of financial misconduct from other environments where financial misconduct is more likely to remain undetected. We argue that firms observe and correctly interpret signals that indicate the environment type (high or low detection probability) in which they evolve, and adjust their behavior accordingly.

#### **3.** Sample Construction

#### 3.1. SEC Salaries

We retrieve annual salaries of SEC employees from the website Govsalaries.com, between the years 2015 and 2021 inclusively. We collect the employee's name, location, job title, annual wage, bonus (where applicable), pay plan, and grade. We retrieve the annual salary caps from the SEC website, using the Wayback Machine to retrieve historical caps.<sup>7</sup> We use the collected geographical location and salaries to compute  $Perc_at_Cap$ , the percentage of SEC employees receiving the maximal salary within 100 miles of a FIPS (Federal Information Processing Standard, a standardized geographic code; we can then match firms to FIPS by their company HQ location). We standardize the  $Pay_at_Cap$  variable (to mean = 0 and standard deviation =1) to facilitate its interpretation. Although we use all available information to compute  $Perc_at_Cap$ , our results are robust to dropping observations associated with employees not directly involved in financial misconduct detection (e.g., secretaries, receptionist, etc.).

Measures of financial misconduct come from different sources: restatements (*Acc\_Res*, *Adv\_Res*, *Fraud\_Res*, *SEC\_Res*) come from Audit Analytics, whereas the Accounting and Auditing Enforcement Releases (*AAER*) are retrieved from the Center for Financial Reporting and

<sup>&</sup>lt;sup>7</sup> https://www.sec.gov/about/careers/sec-compensation, last accessed June 15, 2023.

Management (CFRM). We collect SEC comment letters from Audit Analytics, and securities class actions data from Stanford Law School's Securities class action clearinghouse. Firm characteristics are from Compustat, and firms' headquarters locations are from Bill McDonald's page.<sup>8</sup>

Table 1 presents the descriptive statistics. Panel A reports the yearly number of SEC employees for which we have data, as well as the average and median salary. Panel A also shows that the percentage of SEC employees whose annual salary is capped varies between 4.96% (in 2015) and 8.98% (in 2019). To ease the interpretation, and because the maximum salary varies across years, we standardize the percentage of SEC employees whose salary is capped.

Our main tests consider the impact of the exogenous cap on monetary incentives offered to SEC employees on firm-year level financial misconduct, and the firm-level consequences that derive from firms' observing the signals associated with an environment where the probability of detection is low. Panel B of Table 1 presents descriptive statistics about financial misconduct and firm characteristics. Documented financial misconduct is rare: only 5 and 4 percent of our sample firm-years were affected by accounting and adversarial accounting restatements, respectively. The occurrence of fraud or SEC investigation is even rarer (mean = 0). Similarly, AAER and class actions are infrequent, with 4% of firms being investigated or targeted.

Our main research objective is to describe how firm-level consequences vary with the local probability of detection of financial misconduct. The first step requires us to classify a local environment as one with a high, or low, likelihood of detection of financial misconduct. As described in Section 2.3, we use the exogenously imposed SEC maximal salary to infer cross-sectional variation in local SEC effectiveness in bringing to light cases of financial misconduct. Under the pay-for-performance hypothesis, we expect a negative correlation between the

<sup>&</sup>lt;sup>8</sup> <u>https://www3.nd.edu/~mcdonald/</u>, last accessed August 28, 2023.

percentage of SEC employees receiving the maximum salary and the number of detected cases of financial misconduct. In contrast, under the public service hypothesis, we expect SEC's detection outcomes to be unrelated to the number of employees receiving the highest possible salary.

Figure 1 illustrates the relation between the percentage of SEC employees receiving the maximum salary within 100 miles of the firm's HQ and detected cases of financial misconduct. More specifically, we first regress the financial misconduct variables and  $Perc_at_Cap$  on the set of control variables and generate the residuals from those regressions. We then group the residuals of  $Perc_at_Cap$  into 14 equal-sized bins, and similarly, group the residuals of the financial misconduct variables into the same number of bins. We compute the mean of the financial misconduct and  $Perc_at_Cap$  residuals within each bin, and creates a scatterplot of these 14 data points. Each dot shows the average of the financial misconduct measure for a given level of percentage of SEC employees at the cap, holding the control variables constant. Finally, we plot the best linear fit line constructed from an OLS regression of the financial misconduct residuals on the  $Perc_at_Cap$  residuals.

Figure 1 shows that although the number of detected cases does not decrease monotonically with the percentage of SEC employees whose salary is capped (which is expected given the heterogeneity of SEC employees and their respective value function), there is an overall negative relation between detected cases and salary levels, even after taking into account control variables. Furthermore, the slope is especially negative to *SEC\_Res* and *AAER*, which are both initiated by the SEC. In contrast, the slope of the fitted line when financial misconduct is defined as securities class actions is closer to zero. These findings are consistent with our pay-for-performance hypothesis.

As further validation, Table 2 reports Pearson correlation coefficients among the financial misconduct variables, and the percentage of SEC employees whose salary is capped. We find that

financial misconduct variables are negatively correlated to *Perc\_at\_Cap*, the standardized percentage of SEC employees receiving the maximal salary, and most correlations are significant. These negative correlations align with the pay-for-performance hypothesis. In addition, the percentage of SEC employees leaving the SEC is positively correlated to *Perc\_at\_Cap*, which is also consistent with the interpretation that financially-motivated SEC employees whose salary is capped have higher incentives to move to the private sector, thus earning higher wages and depriving the SEC from their skills and experience in detecting financial misconduct. Table 2 also shows that most pairwise correlations among financial misconduct variables are positive, which is expected, to the extent that issuing an accounting restatement alerts external monitors to potential undergoing issues in disclosure quality, and in turn increases the probability that external monitors investigate the firm. However, correlations among financial misconduct variables, while positive, are low, highlighting the stylized fact that no single entity successfully uncover most financial misconduct cases.

#### 4. Results

#### 4.1. Monitoring Efforts and Percentage of SEC Employees Earning the Maximum Salary

Table 3 presents the results of OLS regressions of financial misconduct on *Perc\_at\_Cap*, the percentage of SEC employees earning the maximum (capped) salary. Our objective by estimating these regressions is to assess cross-sectionally whether a high number of SEC employees earning the maximum salary correlates with an environment favorable to financial misconduct. As such, because we do not attempt to establish causality, the regressions of Table 3 do not include any fixed effects, to avoid contaminating the magnitude of the *Perc\_at\_Cap* impact with firm, state, or year characteristics. In addition, we use, in turn, several different measures of financial misconduct as the dependent variable.

, among others because the positive correlations among the various measures of financial misconduct is sufficiently low to warrant keeping all variables to picture more precisely an environment favorable to financial misconduct.

Table 3 reveals that *Perc\_at\_Cap* is negatively related to all measures of financial misconduct. For instance, a one-standard deviation increase in *Perc\_at\_Cap* associates with a 0.9% decrease in the probability that a firm issues an accounting restatement following an SEC investigation. The effect may appear negligible, but it is economically significant, because such restatements are rare (the full-sample mean of *SEC\_Res* is 0.00). Similarly, Table 3 shows that a one-standard deviation increase in *Perc\_at\_Cap* relates to a 0.026 decrease in the number of comment letters issued by the SEC. The relation between *Perc\_at\_Cap* and the other measures of financial misconduct is similarly negative, suggesting that the higher the percentage of SEC employees earning the maximum salary, the more the local environment becomes conductive to financial misconduct. These findings support the pay-for-performance hypothesis.

In contrast, Column 6 of Table 3 shows that *Perc\_at\_Cap* is unrelated to *CAL*, an indicator variable that equals 1 if a firm is targeted by a securities class action. The insignificant correlation is expected because securities class actions are typically not initiated by SEC employees, or following an SEC investigation. Still, the insignificant relation illustrates that financial misconduct might be circumstantial, rather than a static firm characteristic.

The last column of Table 3 reports results where the dependent variable is the percentage of SEC employees leaving the SEC altogether (employees moving from one SEC office to another SEC office are not counted towards this attrition rate). As mentioned in Section 2.3, employees receiving the maximum salary might switch to the lucrative private sector, if the satisfaction and motivation they derive from monetary incentives exceeds that from public serving. Column 7 shows that indeed, the attrition rate of SEC employees correlate positively and significantly with

the percentage of SEC employees receiving the maximum salary. This finding further supports the pay-for-performance hypothesis.

In short, the results from Figure 1 and Tables 2 and 3 are consistent with the pay-forperformance hypothesis, where effectiveness in detecting financial misconduct decreases abruptly when incentives for additional effort are inexistent. Therefore, in the cross-section, we identify local environments where the probability of financial misconduct detection is low by using the percentage of SEC employees whose salary is capped as a proxy. The next section examines the firm-level consequences.

#### 4.2. Does Firm Performance Increase With Reduced Monitoring Efforts?

If firms self-regulate and disclose high-quality information independent of the monitoring intensity, we should not expect any consequences to the prevalence of the local environments conducive to financial misconduct documented in Table 3. To examine the firm-level impacts of firms doing business in environments where the probability of financial misconduct detection is low, we estimate the following fixed effects panel regressions:

$$ROA_{i} = Pay_at_Cap_{j,t} + \varphi_j + \omega_t + \theta_s + \varepsilon_{i,t}$$
(1)

Where  $ROA_{i,t}$  is firm *i*'s return on assets at period *t*, and  $Pay\_at\_Cap_{j,t}$  is the percentage of SEC employees at regional office *j* who are earning the exogenously imposed maximum salary in year *t*. The terms  $\varphi$ ,  $\omega$  and  $\theta$  denote FIPS, year, and state fixed effects, respectively. We standardize the  $Pay\_at\_Cap$  variable (to mean = 0 and standard deviation =1) to facilitate its interpretation. We match firm-level observations to SEC regional offices data using firms' headquarters location, ensuring that there is no more than 100 miles between the SEC offices and firms' headquarters. The underlying assumption is that SEC employees are more likely to investigate firms whose headquarters are closer geographically, among others because it is easier to gather evidence (Kedia and Rajgopal 2011). Table 4 reports the results.

In all three specifications of Table 4, we find a positive relation between  $Pay_at_Cap$  and contemporaneous firm-level *ROA*. Although we do not establish causality at this stage, the economic magnitude of the effect warrants further investigation: a one-standard deviation in  $Pay_at_Cap$  associates with an increase in firms' average ROA of 1.0% and 1.6%. This positive relation, when coupled with the negative relation between  $Pay_at_Cap$  and the identification of financial misconduct documented in Table 3, may suggest that firms take advantage of the lax monitoring environment to engage in short-term ROA boosting.

We verify the robustness of our results by estimating Equation (1) with different specifications of Perc\_at\_Cap. Table 5 presents the results. We first use the non-standardized *Perc at Cap (Perc at Cap NS*; Column 1); we find similar results to those reported in Table 4. Using the *Perc\_at\_Cap\_NS* eases the economic interpretation of our findings: Column 1 shows that a 1% increase in the salary cap enhances average ROA by 0.2%. We also test whether firms react to the proportion of SEC employees earning the maximum salary. In Column 2, we use Perc\_at\_Cap\_Indic, an indicator variable that equals 1 if at least one SEC employee earns the maximum salary in a given area-year, and zero otherwise. Column 2 shows a large impact on ROA, suggesting that any form of the salary cap impacts ROA. Lastly, in Column 3, we estimate a quartile regression by decomposing *Perc\_at\_Cap* into quartiles. The first quartile (with fewer employees earning the maximum salary) is the comparison group and therefore not shown. Column 3's results suggest the middle quartiles of *Perc\_at\_Cap* impact ROA the most. These results are consistent with our interpretation: if the salary cap constraint is not binding, employees have monetary incentives to increase their monitoring efforts. At the other extremes, if the salary cap constraint is binding for a large number of SEC employees, there are many high-paid (and, presumably, highly experienced) SEC employees in the area, making financial misconduct detection more likely, even if at the margin, SEC employees do not have monetary incentives to increase their detection efforts.

4.3. Why Does Firm Performance Increase With Reduced Monitoring Efforts?

The positive relation between *Perc\_at\_Cap* and ROA that we document in Tables 4 and 5 could arise mechanically if some unobserved factors, including local labor market characteristics, remain unaccounted for. However, our extensive fixed effects specification reduces the probability of unobservable variables driving the relation between *Pay\_at\_Cap* and *ROA*. Among others, because corporate governance is largely static, saturating the regressions with fixed effects minimizes the concern that unobservable variables drive our results.

Still, we expand our model to consider the favorableness of the environment to financial misconduct. More specifically, we estimate the following fixed effects panel regressions:

$$ROA_{i,} = Pay_{at} Cap_{j,t} + FM_{i,t} \times Pay_{at} Cap_{j,t} + FM_{i,t} + \varphi_{j} + \omega_{t} + \theta_{s} + \varepsilon_{i,t}$$
(2)

Where  $ROA_{i,t}$  is firm *i*'s return on assets at period *t*,  $Pay\_at\_Cap_{j,t}$  is the percentage of SEC employees at regional office *j* who are earning the exogenously imposed maximum salary in year *t*, and  $FM_{i,t}$  is a measure of financial misconduct in firm *i* at time *t*. We use different variables to capture the different facets of financial misconduct; each column of Table 6 reports the results of estimating Equation (2) where we use, in turn, different measures of financial misconduct. The terms  $\varphi$ ,  $\omega$  and  $\theta$  denote FIPS, year, and state fixed effects, respectively.

Table 6 shows the results, and highlights that when a higher proportion of SEC employees lack monetary incentives for increasing their detection efforts, resulting in a local environment where the probability of financial misconduct is low, and when firms commit financial misconduct, this results in an enhanced short-term ROA. For instance, considering Column 2, the coefficient of the interaction term *Perc\_at\_Cap* with *Fraud\_Res* is 0.147 (t = 2.15), indicating that a one-standard increase in *Perc\_at\_Cap*, which can be interpreted as a decrease in monitoring scrutiny, associates

with a 14.72% increase in ROA for firms that had to restate their accounting statements due to fraud. In fact, firms engaging in financial misconduct seem to rationally select to commit fraud when the monitoring environment is lax. Indeed, when we use restatements, AAER, restatements investigated by the SEC or comment letters from the SEC, we find no significant effects. Examining the potential channel through which financial misconduct is committed, we find that firms that increase their use of discretionary accruals also experience an increase in their ROA, especially if they evolve in lax monitoring environments (Column 5, interaction coefficient = 0.002, t = 2.95). These results suggest that firms that need to restate their accounting statements due to fraud, may have manipulated their discretionary accruals to artificially increase their ROA.

In contrast, the coefficient of the interaction term when the financial misconduct is defined as shareholder-led security class actions (Column 6) is negative, suggesting that in environments where SEC monitoring is lax, shareholders' monitoring might substitute for the SEC's role, and firms cannot take advantage of the lax environments to enhance firm profitability. If substitute monitoring indeed occurs, then we should observe cross-sectional variation in environment favorableness to financial misconduct.

To examine this possibility further, we split our sample into two, according to the behavior of the focal firms' peers. The literature finds ample evidence of contagion of (un)ethical behavior. For instance, Easley and O'Hara (2023) build on the work of Morris (2000) to propose a model in which agents play a psychological game and imitate their neighbors' behavior, even when that behavior is non-ethical. In the context of our tests, firms could rationally imitate their peers' financial misconduct, if such non-ethical behavior has a low probability of being identified, and allow the focal firms' earnings and ROA to compare favorably to their peers'. For this test, we sort state-county-year combinations into those where any of the firms headquartered in this area (with the possible exception of the focal firm) have committed any type of financial misconduct, and those where no financial misconduct of any type was detected in firms headquartered in the area. We consider all types of financial misconduct, because we argue that there is no direct mapping between monitors' type and the nature of financial misconduct. Rather, we propose that firms observe their peers' behavior and the current probability of detection, and act opportunistically.

We estimate Equation (1) separately for the subsample of focal firms whose peers also commit financial misconduct, and for the subsample of focal firms whose peers' behavior is ethical. Table 7 shows the results, and reveals that in environments where a larger proportion of SEC employees' salaries are capped, firms are more likely to imitate their peers, and commit financial misconduct to increase their ROA. The last column of Table 7 shows the statistics for the test of coefficients equality, and reveals that the *Perc\_at\_Cap* coefficients of Columns 1 and 2 are statistically different. This generalized unethical behavior suggests that shareholders do not substitute for the SEC's monitoring role, except in rare occasions. Because the probability of facing a security class action increases in the stock underperformance, and that lax supervision from the regulator associates with short-term ROA-increasing financial misconduct, it is unlikely that shareholders will successfully identify misconduct until firm performance becomes subpar.

Lastly, we explore the financial distress channel. Typically, the SEC pays more attention to financially distressed firms.<sup>9</sup> For distressed firms under close SEC monitoring, there is little to no benefit from conducting business in an environment with a low probability of detection of financial misconduct, as they cannot engage in ROA enhancing because the lax monitoring applies to other local, but non-distressed firms. Therefore, we expect the positive relation between *Perc\_at\_Cap* and ROA to concentrate in non-financially distressed firms.

<sup>&</sup>lt;sup>9</sup> The SEC is transparent in mentioning that financial distress is one of the factors that it considers when deciding which firms it should investigate. This 2023 report is an example, though similar reports have been published in years prior: <u>https://www.sec.gov/files/2023-exam-priorities.pdf</u>, last accessed August 30, 2023.

To verify this corollary of our second hypothesis, we estimate Equation (1), but split the sample into firms with above (below) financial leverage than the sample yearly average. Table 8 presents the results, and shows that *Perc\_at\_Cap* is significant only in the subsample of firms with below-average financial leverage. Firms with above-average financial leverage (Column 2) are at higher risk of close SEC monitoring, and therefore do not exhibit opportunistic behavior by engaging in ROA improvements even when the general, but local, probability of detection of financial misconduct is low. The last column, which presents the result of a *t*-test for the equality of coefficients from Columns 1 and 2, indicates that firms with above-average financial leverage.

We also examine whether the relation between *Perc\_at\_Cap* and ROA varies with firm size. In theory, firm size should not be the primary driver of the SEC's monitoring intensity. We split the sample into large and small firms along the sample median market capitalization, and estimate Equation (1) for each subsample separately (results untabulated). We find no significant difference in the *Perc\_at\_Cap* coefficients, thus minimizing concerns that our results are spurious or that unobservable variables that correlate with firm size drive our results. Taken together, our results suggest that firms are not strictly (un)ethical, but rather, exhibit opportunistic behavior when conditions favorable to financial misconduct occur.

#### 5. Robustness

Although our baseline tests use a rich structure of fixed effects, thus minimizing concerns that unobservable variable drive our results, we verify that our main results are robust to the omitted variables bias using Oster's (2019) methodology. In essence, the Oster methodology assesses the impact of unobservable control variables on the treatment effect by taking into account the

contributions of the observable and unobservable controls to the *R*-squared value. Table IA.1 reports the bounds of the bias-adjusted *Perc\_at\_Cap* coefficients under broad parameter values recommended by Oster (2019). For ease of comparison, both the baseline and controlled regressions include FIPS, year x NAICS and Year x State fixed effects. Since none of the reported intervals of the *Perc\_at\_Cap* coefficients includes zero, we conclude that the reported results in Table 4 are robust. Indeed, the *Perc\_at\_Cap* results remain even if the effect of the selection of unobservable variables is assumed to be three times larger than the selection of observables (i.e.,  $\delta = 3$ ), or if it is assumed that the unobservables explain all of the variations in the dependent variable.

#### 6. Conclusion

We examine the behavior of firms conducting business in environments that appear having a low probability of detection of financial misconduct. We estimate the probability of detection by using the percentage of local SEC employees earning the exogenously imposed maximum salary. We argue that if at this pay level, SEC employees are more motivated by monetary incentives than by an intrinsic desire to serve the public, SEC employees earning the maximum salary will not increase their financial misconduct detection efforts, thus resulting in a lower external monitoring intensity. Therefore, our proxy for the intensity of external monitoring varies both in the crosssection and in time, providing us with a more precise measure to capture circumstantial financial misconduct. Consistent with our hypothesis, we find a negative correlation with the percentage of SEC employees at the salary cap and the local rate of detected financial misconduct.

Turning to firm-level consequences, we document that firms take advantage of the temporary lax monitoring environments by engaging in short-term ROA enhancing. Indeed, we find that firms that have to restate their accounting statements due to fraud are particularly likely of taking advantage of the low probability of financial misconduct detection, and they improve their ROA through an increase in discretionary accruals. Consistent with the literature that documents contagion effects in unethical behavior, we show that firms are more likely to engage in short-term ROA enhancing if their peers commit financial misconduct, possibly because of herding behavior, or because focal firms rationally justify their behavior through the lower probability of detection.

Our results contribute to the financial misconduct literature by showing that engaging in financial misconduct is partially circumstantial: even inherently ethical firms take advantage of temporarily favorable conditions to enhance their ROA. Our results suggest that firms are perceptive of signals about the local monitoring intensity. More generally, our results add to the debate about the correct salary and incentives to offer to public servants; our results imply that imposing an exogenous and publicly observable cap on salaries of SEC employees may generate long-term and far-reaching negative consequences for investors.

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# Appendix

# **Table A.1. Variable Definitions**

Variable	Definition
$AAER_{i,t}$	Indicator variable that equals 1 if there was an Accounting and
	Auditing Enforcement Release (AAER) for firm <i>i</i> in year <i>t</i> , and zero
	otherwise.
$CAL_{i,t}$	Indicator variable that equals 1 if a class action lawsuit is filed against
	firm <i>i</i> in period <i>t</i> , and zero otherwise.
$Disc\_Acc_{i,t}$	Discretionary accruals of firm <i>i</i> in period <i>t</i> , where discretionary
	accruals are computed following the modified Jones model (Dechow
	et al. 1995).
$Fraud\_Res_{i,t}$	Indicator variable that equals 1 if firm <i>i</i> 's accounting results were
	restated due to fraud in period <i>t</i> , and zero otherwise.
Hi_Comment	Indicator variable that equals 1 if firm <i>i</i> received more SEC comment
	letters than the median firm in year <i>t</i> , and zero otherwise.
Hi_Disc_Acc	Indicator variable that equals 1 if firm <i>i</i> 's discretionary accruals are
	higher than the sample median in year t, and zero otherwise.
Hi_SEC_Turnover	Indicator variable that equals 1 if FIPS f has higher than sample
	median attrition rate in year t, and zero otherwise.
$Perc\_at\_Cap(\_NS)_{r,t}$	For each regional SEC office <i>r</i> and year <i>t</i> , the number of SEC
	employees whose annual salary is at the imposed salary cap.
	<i>Perc_at_Cap_NS</i> is the raw percentage, and <i>Perc_at_Cap</i> is
	standardized to mean 0 and standard deviation 1.
ROA	The ratio of net income (NI) to total assets (AT).
$SEC\_Comment_{i,t}$	Number of SEC comment letters received by firm <i>i</i> in year <i>t</i> .
$SEC\_Leaving_{r,t}$	Percent of SEC employees from regional office r who leave the SEC
	at period <i>t</i> .
$SEC\_Res_{i,t}$	Indicator variable that equals 1 if firm <i>i</i> 's accounting results were
	restated in period t and the SEC investigated the issue, and zero
	otherwise.

## Figure 1. Percentage of SEC Employees With Capped Salaries and Detection of Financial Misconduct

This figure shows the relation between the percentage of SEC employees whose salary is equal to the maximum possible salary and various financial misconduct measures. Each panel shows a binned scatterplot of a financial misconduct measure on *Perc\_at\_Cap*. Each dot of each binned scatterplot represents the average residuals of the partitioned regressions of the financial misconduct on control variables (vertical axis), and *Perc\_at\_Cap* on control variables (horizontal axis). We plot the best linear fit line constructed from an OLS regression of the financial misconduct residuals on the *Perc\_at\_Cap* residuals.

The title of each panel specifies the financial misconduct measure used in that panel. Variable definitions are in Table A.1 of the appendix. The data are for the years 2015 to 2021.



# **Table 1. Summary Statistics**

This table presents summary statistics. Panel A shows yearly statistics on SEC employees and number of firms included in the sample, whereas Panel B presents firm-level statistics. Variable definitions are in Table A.1 of the appendix. The data are for the years 2015 to 2021.

Panel A	Panel A. SEC Employees Characteristics						
Year	N, firms	N, FIPS	N, SEC	SEC Mean	SEC Median	Perc_at_Cap_NS	
			Employees	Employees Wage			
2015	1,354	138	3,653	182,498	190,579	4.96	
2016	1,543	168	4,199	183,006	191,573	5.50	
2017	1,550	163	4,249	189,868	199,865	7.15	
2018	1,595	168	4,093	197,488	207,692	8.50	
2019	1,590	168	3,871	201,348	211,365	8.98	
2020	1,857	208	4,106	198,419	211,259	7.33	
2021	2,033	213	4,252	198,176	208,724	7.21	
Panel B. Firm Characteristics							
		Ν	Me	ean	SD	Median	
ROA		11,522	-0	.13	0.34	0.00	
Perc_at	_Cap_NS	11,522	7.	15	6.71	6.94	
Perc_at	_Cap	11,522	0.	00	1.00	-0.03	
SEC_Re	25	11,522	0.	00	0.04	0.00	
Fraud_I	Res	11,522	0.	00	0.05	0.00	
AAER		11,522	0.00		0.04	0.00	
SEC_Ca	omment	11,522	0.73		1.16	0.00	
Disc_Ac	с <i>с</i>	10,662	-0	.08	0.63	0.00	
CAL		11,522	0.	04	0.19	0.00	
SEC_Le	aving	11,522	5.	31	11.72	2.59	

## **Table 2. Correlations**

This table reports Pearson correlation coefficients among variables of interest. *P*-values for the significance of the correlation coefficients are reported in parentheses. Variable definitions are in Table A.1 of the appendix. The data are for the years 2015 to 2021.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Perc_at_Cap	1.000						
(2) $SEC\_Res$	-0.022	1.000					
	(0.016)						
(3) Fraud_Res	-0.017	0.263	1.000				
	(0.076)	(0.000)					
(4) AAER	-0.015	0.215	0.089	1.000			
	(0.111)	(0.000)	(0.000)				
(5) SEC_Comment	-0.023	0.004	0.002	0.009	1.000		
	(0.015)	(0.661)	(0.815)	(0.315)			
(6) Disc_Acc	-0.017	0.006	0.008	0.005	-0.012	1.000	
	(0.075)	(0.521)	(0.420)	(0.611)	(0.216)		
(7) <i>CAL</i>	-0.011	0.069	0.055	0.037	0.074	-0.004	1.000
	(0.224)	(0.000)	(0.000)	(0.000)	(0.000)	(0.694)	
(8) SEC_Leaving	0.025	-0.008	-0.006	-0.009	-0.003	0.007	0.002
	(0.008)	(0.362)	(0.528)	(0.325)	(0.711)	(0.478)	(0.847)

#### **Table 3. Salary Cap and Monitoring Effort**

This table reports OLS regressions results. Each column uses a different financial misconduct measure as the dependent variable; the financial misconduct measure is specified in the column header. The main independent variable of interest is the standardized percentage of SEC employees whose annual salary is equal to the maximum salary ( $Perc_at_Cap$ ). Variable definitions are in Table A.1 of the appendix. Coefficient estimates are shown, and their robust standard errors are displayed in parentheses. \*\*\*(\*\*)(\*) indicates significance at the 1%(5%)(10%) two-tailed level, respectively. The data are from the years 2015 to 2021.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SEC_Res	Fraud_Res	AAER	SEC_Comment	Disc_Acc	CAL	SEC_Leaving
Perc_at_Cap	-0.0009***	-0.0008**	-0.0006*	-0.0263**	-0.0108*	-0.0022	0.2896**
	(0.0003)	(0.0004)	(0.0003)	(0.0107)	(0.0061)	(0.0018)	(0.1279)
Controls	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Ν	11,522	11,522	11,522	11,522	10,662	11,522	11,522
R-Square	0.0005	0.0003	0.0002	0.0005	0.0003	0.0001	0.0006
FIPS FE	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Year FE	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Year by NAICS FE	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Year by State FE	Ν	Ν	Ν	Ν	Ν	Ν	Ν

#### **Table 4. Salary Cap and Firm Performance**

This table reports fixed effects regression models results. The dependent variable is  $ROA_{i,t}$ , that is, firm *i*'s ROA in period *t*. The independent variable of interest is the standardized percentage of SEC employees whose annual salary is equal to the maximum salary (*Perc\_at\_Cap*). Variable definitions are in Table A.1 of the appendix. Coefficient estimates are shown, and their robust standard errors are displayed in parentheses. \*\*\*(\*\*)(\*) indicates significance at the 1%(5%)(10%) two-tailed level, respectively. The data are from the years 2015 to 2021.

	(1)	(2)	(3)
	ROA	ROA	ROA
Perc_at_Cap	0.0103*	0.0155**	0.0141**
_	(0.0057)	(0.0068)	(0.0064)
Controls	Ν	Ν	Ν
Ν	11,522	11,522	11,522
R-Square	0.1216	0.3471	0.3514
FIPS FE	Y	Y	Y
Year FE	Y	Ν	Ν
Year by NAICS FE	Ν	Y	Y
Year by State FE	Ν	Ν	Y

#### Table 5. Alternative Measures of the Salary Cap and Firm Performance

This table reports fixed effects regression models results. The dependent variable is  $ROA_{i,t}$ , that is, firm *i*'s ROA in period *t*. In Column 1, the independent variable of interest is the non-standardized percentage of SEC employees whose annual salary is equal to the maximum salary (*Perc\_at\_Cap\_NS*). In Column 2, the main independent variable is *Perc\_at\_Cap\_Indic*, which is an indicator variable that equals 1 if at least one SEC employee earns the maximum salary in an areayear, and zero otherwise. In Column 3, we decompose *Perc\_at\_Cap* into quartiles (*Q2*, *Q3*, and *Q4*); each measures equals the continuous *Perc\_at\_Cap* if the observation is in that quartile, and zero otherwise. The first (bottom) quartile is the comparison group and therefore not shown. Variable definitions are in Table A.1 of the appendix. Coefficient estimates are shown, and their robust standard errors are displayed in parentheses. \*\*\*(\*\*)(\*) indicates significance at the 1%(5%)(10%) two-tailed level, respectively. The data are from the years 2015 to 2021.

	(1)	(2)	(3)
	ROA	ROA	ROA
Perc_at_Cap_NS	0.0021**		
	(0.009)		
Perc_at_Cap_Indic		0.0864***	
		(0.0298)	
Perc_at_Cap_2Q			0.1128***
			(0.0334)
Perc_at_Cap_3Q			0.1090***
			(0.0346)
Perc_at_Cap_4Q			0.0678**
			(0.0324)
Controls	N	Ν	Ν
Ν	11,522	11,522	11,522
R-Square	0.3514	0.3515	0.3517
FIPS FE	Y	Y	Y
Year by NAICS FE	Y	Y	Y
Year by State FE	Y	Y	Y

### Table 6. Monitoring Efforts, Detection of Financial Misconduct and Firm Performance

This table reports fixed effects regression model results. The dependent variable is  $ROA_{i,t}$ , firm *i*'s ROA in period *t*. The independent variables of interest are the standardized percentage of SEC employees whose annual salary is equal to the maximum salary (*Perc\_at\_Cap*), a financial misconduct (FM) measure, and the interaction of both the FM measure and *Perc\_at\_Cap*. Each column uses a different FM measure as the independent variable; the financial misconduct measure is specified in the column header. Variable definitions are in Table A.1 of the appendix. Coefficient estimates are shown, and their robust standard errors are displayed in parentheses. \*\*\*(\*\*)(\*) indicates significance at the 1%(5%)(10%) two-tailed level, respectively. The data are from the years 2015 to 2021.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FM Var.	SEC_Res	Fraud_Res	AAER	Hi_Comment	Hi_Disc_Acc	CAL	<i>Hi_SEC_turnover</i>
Perc_at_Cap	0.0143**	0.0138**	0.0140**	0.0170**	0.0035	0.0149**	0.0143*
	(0.0061)	(0.0064)	(0.0064)	(0.0079)	(0.0117)	(0.0063)	(0.0082)
FM	-0.0262	0.1086*	0.0057	-0.0484***	0.0231***	0.0530***	0.0188*
	(0.1219)	(0.0594)	(0.0772)	(0.0077)	(0.0079)	(0.0153)	(0.0106)
FM x Perc_at_Cap	0.0919	0.1472**	-0.0740	-0.0032	0.0180***	-0.0288**	-0.0030
	(0.3178)	(0.0685)	(0.0987)	(0.0068)	(0.0061)	(0.0119)	(0.0076)
Ν	11,522	11,522	11,522	11,522	10,604	11,522	11,522
R-Square	0.3515	0.3516	0.3514	0.3550	0.3508	0.3524	0.3515
FIPS FE	Y	Y	Y	Y	Y	Y	Y
Year×NAICS FE	Y	Y	Y	Y	Y	Y	Y
Year×State FE	Y	Y	Y	Y	Y	Y	Y

### Table 7. Peers' Behavior, Salary Cap and Firm Performance

Columns 1 and 2 of this table report fixed effects regression model results. The dependent variable is  $ROA_{i,t}$ , firm *i*'s ROA in period *t*. The independent variable of interest is the standardized percentage of SEC employees whose annual salary is equal to the maximum salary (*Perc\_at\_Cap*). Columns 1 and 2 split the sample along the contemporaneous financial misconduct (FM) commitment of the focal firm's peers in the same FIPS. We sort state-county-year combinations into those where any of the firms headquartered in this area (with the possible exception of the focal firm) have committed any type of financial misconduct (Column 2), and those where no financial misconduct of any type was detected in firms headquartered in the area (Column 1).

Column 3 presents the result of a *t*-test for the equality of coefficients from Columns 1 and 2. Variable definitions are in Table A.1 of the appendix. Coefficient estimates are shown, and their robust standard errors are displayed in parentheses. \*\*\*(\*\*)(\*) indicates significance at the 1%(5%)(10%) two-tailed level, respectively. The data are from the years 2015 to 2021.

	Peers in FIPS are not committing FM	Peers in FIPS are committing FM	Difference
	(1)	(2)	(3)
	ROA	ROA	
Perc_at_Cap	-0.0686	0.0160**	-0.0846*
	(0.0493)	(0.0079)	(0.0483)
Ν	2,275	8,483	
R-Square	0.5130	0.3380	
FIPS FE	Y	Y	
Year by NAICS FE	Y	Y	
Year by State FE	Y	Y	

## Table 8. Financial Leverage, Salary Cap and Firm Performance

Columns 1 and 2 of this table report fixed effects regression model results. The dependent variable is  $ROA_{i,t}$ , firm *i*'s ROA in period *t*. The independent variable of interest is the standardized percentage of SEC employees whose annual salary is equal to the maximum salary (*Perc\_at\_Cap*). Columns 1 and 2 split the sample along the yearly average financial leverage. Column 1 reports the results for firms with lower financial leverage than the sample average, and Column 2 shows results for firms with above-average financial leverage.

Column 3 presents the result of a *t*-test for the equality of coefficients from Columns 1 and 2. Variable definitions are in Table A.1 of the appendix. Coefficient estimates are shown, and their robust standard errors are displayed in parentheses. \*\*\*(\*\*)(\*) indicates significance at the 1%(5%)(10%) two-tailed level, respectively. The data are from the years 2015 to 2021.

	Below Average	Above Average	Difference
	Financial Leverage	Financial Leverage	
	(1)	(2)	(3)
	ROA	ROA	
Perc_at_Cap	0.0496***	0.0005	0.0491**
	(0.0169)	(0.0088)	(0.0196)
Ν	5,251	5,344	
R-Square	0.3764	0.4102	
FIPS FE	Y	Y	
Year by NAICS FE	Y	Y	
Year by State FE	Y	Y	

# Internet Appendix When There's A Cap on SEC Pay, Firms Will Play With Their ROA

Table IA.1. Stability of the Perc_at_Cap Coefficient in the ROA Regression: Potential Effect
of the Unobservable Variables

(1)	(2)	(3)	(4)	(5)	(6)
Baseline Effect, [ <i>R</i> <sup>2</sup> ]	Controlled Effect, $[R^2]$		$R_{\max} = \min(2\tilde{R}; 1)$	$R_{\max} = \min(1.5 ilde{R}; 1)$	$R_{\max} = \min(1.25\tilde{R}; 1)$
0.014, [0.351]	0.019, [0.542]	1	[0.019, 0.031]	[0.019, 0.026]	[0.019, 0.023]
0.014, [0.351]	0.019, [0.542]	2	[0.019, 0.044]	[0.019, 0.034]	[0.019, 0.026]
0.014, [0.351]	0.019, [0.542]	3	[0.019, 0.056]	[0.019, 0.041]	[0.019, 0.030]

This table reports the robustness of the *Perc\_at\_Cap* coefficient in the ROA regressions of Table 4, estimated under different assumptions as per Oster (2019). The first two columns report the *Perc\_at\_Cap* coefficients and R-squared for the baseline (e.g.,  $ROA_{it} = \beta_1 Perc_at_Cap_{it} + \varepsilon_{it}$ ) and the controlled regressions ( $ROA_{it} = \beta_1 Perc_at_Cap_{it} + \varepsilon_{it}$ ) where  $X_{it}$  is a vector of control variables including size, market-to-book ratio, capital expenditures, cash-to-assets, asset turnover, net profitability and leverage. For ease of comparison, both the baseline and controlled regressions include FIPS, year x NAICS and Year x State fixed effects.

Columns 4 to 6 report the identified *Perc\_at\_Cap* coefficient sets. The sets are bounded by  $\tilde{\beta}$ , the coefficient from the regressions with controls, and  $\beta^*$ , the bias-adjusted coefficient after accounting for the bias from the unobservable variables, calculated using Oster's (2019) methodology.  $R_{\text{max}}$  is the theoretical upper bound on *R*-squared, which is the *R*-squared value from a (hypothetical) regression of the dependent variable on *Perc\_at\_Cap* and both observed and unobserved controls. Column 4 to 6 progressively relax the value of  $R_{\text{max}}$ .  $\tilde{R}$  is the *R*-squared from the regression with controls. The parameter  $\delta$  quantifies the selection relationship:  $\delta = 1$  implies that the unobservable and observables are equally related to the treatment, and  $\delta = 2$  implies that the unobservables are twice as important as the observables. Since none of the identified coefficient sets includes zero, the *Perc\_at\_Cap* effect is not influenced by unobservable variables.