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Abstract

We examine whistleblowers' and firms' behaviors under cash-for-information programs. Using a dataset of allegations filed under the False Claims Act, we find that whistleblowers only report 50% of the cases internally before contacting the authorities, and only 30% of all cases result in a settlement, raising the concern that cash-for-information programs trigger many meritless allegations. However, whistleblowers are less likely to report internally when firms' governance, internal controls, and employee relations are weaker. Firms are less likely to initiate internal investigations and refrain from retaliation against whistleblowers when their control systems are weaker. We also document that cash-for-information programs compensate whistleblowers for the threat of job loss and that career consequences for whistleblowers are not as severe as previously documented. Our evidence suggests that whistleblowers' behavior is primarily shaped by their firms' behavior, and that cash-for-information programs reward employees, particularly rank-and-file employees, for the costs they bear in providing regulators with information.

Keywords: Whistleblowers; Cash-for-information schemes; False Claims Act; Corporate misconduct; Compliance programs.

JEL Classifications: D82, G18, M41

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1. Introduction

In recent years, whistleblower programs have gained momentum as a tool in regulators' efforts to enforce corporate misconduct in areas such as financial fraud, government procurement fraud, or tax fraud.¹ To incentivize whistleblowers to come forward, regulators increasingly employ bounty schemes that pay individuals cash rewards for revealing information about illegal conduct. For instance, the False Claim Act (FCA) of 1863, the government's whistleblower program to combat procurement fraud, awards whistleblowers between 15% and 30% of the recovery from lawsuits. More recently, the Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA) of 2010, which was modeled after the FCA, introduced a "cash-for-information" program that awards whistleblowers between 10% and 30% of the monetary sanctions collected in actions brought by the Securities and Exchange Commission (SEC).

In this study, we conduct an in-depth analysis of nearly 2,000 lawsuits filed under the FCA during 1994 to 2012 to assess the merits of cash-for-information programs. We examine two research questions. First, are the actions of employee whistleblowers under cash-for-information regimes more consistent with employee loyalty and duty towards the firm, or with ulterior motives of personal gain? Second, what are the short and long-term career consequences for employee whistleblowers under these regimes?

Proponents of cash-for-information programs point to the success in terms of cases and penalties imposed on corporations.² They portray whistleblowers as guided by their duty to report wrongdoing, without having ulterior motives of personal gain or glory (Leeds, 1963).

¹ See Dasgupta and Kesharwani (2010) for a survey of the literature.

² Through the end of the 2018 fiscal year, SEC awards totaled \$326 million to 59 whistleblowers. In 2018 alone, the SEC issued more than \$168 million in awards to 13 whistleblowers, and received more whistleblower tips than in any other previous year (SEC, 2018).

Under this “prosocial-behavior” view, cash-for-information programs simply compensate employee whistleblowers for taking the risk of reporting wrongdoing to the authorities.

In contrast, critics of these programs argue that cash-for-information programs incentivize employees to share information with regulators instead of alerting the company, encouraging whistleblowers to obtain a quick payday (e.g., Miceli and Near, 1992). They argue that companies are far better equipped to assess tips in the context of their particular business and to “separate the wheat from the chaff.” Under this “antisocial-behavior” view, cash-for-information programs can lead employees to file meritless allegations that waste resources of regulators and accused firms alike (Bok, 1980; Gobert and Punch, 2000).

We focus on whistleblower lawsuits brought under the FCA for multiple reasons. First, the FCA’s cash-for-information regime is an established program to combat fraud against the government with over 17,000 lawsuits and over \$59 billion in recoveries between 1987 and 2018 (DOJ, 2018a). Consequently, focusing on the FCA allows us to examine the behavior of both whistleblowers and firms under a well-known cash-for-information regime over a long time period. Second, information on the behavior of both whistleblowers and firms is typically unobservable. We overcome this problem by obtaining the court documents pertaining to each whistleblower lawsuit. The typical lawsuit contains detailed information about the case, including employee rank within the organization, the alleged fraud committed by the firm, actions taken by the employee to report the alleged fraud both within the organization and to regulators, as well as firms’ reactions to the allegation. Third, the full sample of whistleblower tips brought to the authorities is typically unobservable, forcing researchers to analyze subsamples of tips (e.g., Bowen et al., 2010; Dyck et al., 2010).³ We overcome this problem

³ Prior studies typically use whistleblower data from two sources: the press and the U.S. government’s Occupational Health and Safety Administration (OSHA), the agency responsible for handling complaints of discrimination from whistleblowers who report SOX-related allegations (e.g., Bowen et al., 2010; Call et al., 2016;

by studying the entire population of FCA whistleblower lawsuits filed with courts. Fourth, the FCA does not have any reporting prerequisites for whistleblowers (such as, requiring or encouraging them to report internally to the firm first), which allows us to study whistleblowers' reporting choices. Lastly, the FCA's whistleblower program has served as the blueprint for several other whistleblower programs, extending the validity of our findings to other programs.

Note that we do not observe whistleblower reports that were not reported to authorities. However, our objective is to examine the behavior of whistleblowers under cash-for-information programs. Two key elements we examine for each lawsuit are whether the complaint was initially raised internally or directly with the regulator, and whether it led to a settlement. Therefore, the relevant sample for us is the sample of lawsuits filed with the authorities.⁴

We observe that in half of the cases, whistleblowers filed the lawsuit with a court without reporting the issue internally first. Moreover, approximately 30% of the lawsuits resulted in a settlement, suggesting that the majority of allegations lack merit. At first glance, these statistics seem supportive of critics' views that a large number of whistleblowers appear to file cases in the hope of a financial reward.

We conduct three analyses to further explore the validity of this view. First, we examine whether directly filing a lawsuit with authorities without reporting the issue internally is

Call et al., 2018; Dyck et al., 2010; Wilde, 2017). Bowen et al. (2010), for example, acknowledge that the press sample likely reflects media bias towards more-visible and larger firms, while the OSHA sample requires that the employee not only engages in whistleblowing but also files a discrimination complaint. Some studies also include FCA whistleblower cases. For example, 50% of the press sample used by Bowen et al. (2010) consists of FCA cases related to overbilling.

⁴ We do not observe whistleblower reports that either got resolved internally, or did not get reported to regulators for other reasons. Access to these cases would allow us to examine additional questions on firm characteristics related to successful internal resolution of complaints. The study by Stubben and Welch (2019) provides some insights on these questions.

associated with the likelihood of achieving a settlement or the settlement amount. If lawsuits that are directly reported to the authorities lacked merit, we would expect to find a lower probability of settlement and lower settlement amounts for these cases. However, we do not find a significant relation between the reporting decision and case outcome, suggesting that the cases directly reported to the authorities do not necessarily imply less merit. Additional descriptive evidence supports this inference. The majority of employees who did not report the issue internally mention fear of retaliation as their reason. Among the different types of employees, we find that rank-and-file employees file approximately two thirds of all cases. In terms of the likelihood of settlement and settlement amount, we find that lawsuits brought by rank-and-file employees are more likely to result in a settlement and reach higher settlement amounts than those filed by upper management, suggesting that rank-and-file employees often have valuable information about corporate misconduct.

Second, we use the subset of public firms from our sample to compare the characteristics of firms where whistleblowers report internally to those where they do not.⁵ If whistleblowers are simply looking for a quick payday or publicity when reporting directly to regulators, there should be no systematic differences across these sets of firms. In contrast, we find that stronger governance, internal controls, and employee relations significantly increase employees' willingness to report internally. We also find that rank-and-file employees are on average less likely to report internally compared to upper management. However, this relation is mitigated for firms with strong governance. Interestingly, whistleblowers typically report an issue internally by informing top management (38% of all lawsuits) or their direct supervisor (34% of all lawsuits). In contrast, employees rarely use channels designed to report misconduct such as reporting to the legal department (10% of all lawsuits), Human Resources (4% of all

⁵ We limit our regression analyses to public firms due to data availability.

cases), or via the firm's hotline (2% of all lawsuits). In addition, lawsuits in which employees have reported misconduct to their supervisors are more likely to be settled and have higher average settlements. These statistics suggest that those cases are not resolved internally, at least in part, because many supervisors do not know how to appropriately deal with allegations.

Third, we further examine firms' responses to allegations that were reported internally. We find that firms ignore about two thirds of all allegations and only initiate internal investigations in about 6% of all cases; however, these cases tend to have the lowest settlements. Public firms that have stronger employee relations are more likely to conduct an internal investigation. We also find that public firms are more likely to conduct an internal investigation when the lawsuit is brought by a rank-and-file employee as compared to upper management. However, this effect is concentrated in the subset of public firms with strong governance. In addition, firms typically retaliate against employees via firing (in more than one third of all cases), harassment (about 16% of all cases), threats (about 10% of all cases), and demotions (about 6% of all cases). In only 21% of all cases, the firm does not retaliate against an employee whistleblower. The likelihood of retaliation is higher if the percentage of independent directors is lower, suggesting that stronger governance reduces the likelihood of retaliation. We also find that rank-and-file employees are more likely to suffer retaliation if a public firm's governance is weak.

Overall, our evidence suggests that employee whistleblowers typically aim to report the issue internally first, but that they refrain from doing so when they expect the firm to have weak processes in place to appropriately respond to the allegations as captured by firms' internal controls, employee relations, and governance. In instances when employees report the issue internally first, their complaint is often ignored and leads to retaliation. Overall, these

findings are more consistent with the view that cash-for-information programs reward employees for the costs they bear in providing regulators with information.

We next explore medium- and long-term consequences that employee whistleblowers face in organizations. To do so, we collect the profiles of whistleblowers from a widely used professional networking site. Although in our previous analysis we find that over 35% of employees are fired after blowing the whistle, we also find that the average whistleblower finds a new job approximately within 1 year. In 52% of the cases the next job is better or equivalent to the one at the accused firm, while 10% of employees' next job is worse and 21% of employees become self-employed. We also find that only 16% of whistleblowers move to another state for their next job, and 35% change industry. To assess longer term consequences, we examine the most recent job and find that 58% of the times it is better or equivalent as the job at the accused firm. At the same time, there is a reduction in self-employment from 21% to 16%. Over this longer span of time (approximately 8 years after the filing), 24% of whistleblowers are working in a different state, and 42% have changed industries.

Our research has important implications for scholars, regulators, and practitioners. However, it is important to note that the interpretation of our results is limited by the descriptive nature of our study. There could be omitted correlated factors that explain the associations we document, and as such, causal inferences are difficult.

Despite cash-for-information programs becoming a centerpiece of regulatory efforts, research on their effectiveness in promoting individuals to blow the whistle is “woefully lacking” (Pope and Lee, 2013). Our paper sheds light on this subject by providing large sample evidence on the behavior of both employee whistleblowers and firms under the FCA cash-for-information program. Consistent with Bowen et al. (2010), we show that employee whistleblowers reporting decisions are systematically related to the quality of firms'

governance structures. In addition, we complement their results by examining how whistleblowers' choices to report internally versus directly to regulators varies with a firm's compliance systems, as well as the eventual success of those allegations.⁶ Thus, we contribute to the literature by providing more nuanced evidence on whistleblowers' objectives under cash-for-information schemes. Moreover, whistleblowers contend that their main reason for reporting directly to regulators is the anticipation of severe retaliation from their firms, and our results indicate that they are justified in their concerns.

Relatedly, Dyck et al. (2010) document that employee whistleblowers face severe career consequences and personal losses. We extend their inferences in two ways. First, they only examine career consequences for 26 employees (including 10 unnamed whistleblowers), with only 7 of them potentially under cash-for-information programs. We are able to provide insights on the merits of these programs for a much larger sample. Second, given their sample limitations, they are forced to underestimate the economic benefits that whistleblowers receive under cash-for-information programs. Our ability to capture both the potential benefits (i.e., the cash rewards) and costs (i.e., negative career outcomes) to employees provides a more complete view of the career consequences for whistleblowers.

Our study offers two main insights for policy makers. First, we find that the average employee whistleblowers receives approximately \$200,000 in rewards, which seems to adequately compensate rank-and-file employees for their potential costs of bringing forward credible information.⁷ At the same time, we observe few whistleblowers among upper

⁶ Bowen et al. (2010) analyze 81 employee whistleblowing allegations between 1989 and 2004 reported in the financial press and 137 instances of employee whistleblowing between 2002 and 2004 obtained from the records of OSHA. However, Bowen et al. (2010) do not explore the channels followed by a whistleblower prior to reporting externally.

⁷ As a reference point, the average salary of the median employee working for a publicly traded firm in 2018 is approximately \$50,600, calculated using median pay from annual proxy statements and number of employees from S&P Global Market Intelligence (Serkez and Francis, 2019).

management, likely because such rewards are not able to compensate these higher earning executives for their costs. This information may be useful for regulators in designing optimal reward programs, which remains an ongoing challenge (Engstrom, 2017). Second, the conflicting viewpoints on cash-for-information schemes have motivated different regulatory approaches on whistleblower reporting procedures. While the FCA leaves it up to the whistleblower whether to raise the issue internally or directly contact the authorities, the SEC whistleblower program considers an employee's internal reporting before contacting the SEC as a positive factor when considering an award percentage (SEC, 2019).⁸ Our evidence that whistleblowers' reporting decisions are primarily driven by their firms' governance systems (supporting more prosocial whistleblower motives), can help regulators devise more effective reporting policies and guidelines.

Finally, corporations and employees can benefit from our paper as well. First, firms can benefit from the finding that their own compliance systems influence whistleblowers' reporting choices as opposed to ulterior motives of whistleblowers. Second, we find that cases that employees report to their supervisors or top managers are more likely to get settled and have high settlement amounts. In contrast, for cases where companies conduct internal investigations, those that get reported to regulators have a low likelihood of settlement and negligible settlement amounts. These findings suggest that conducting internal investigations and ensuring an appropriate response by supervisors and managers to a complaint can help firms create a more effective compliance environment and lower their legal costs. Finally, our evidence on the career outcomes for whistleblowers can inform individuals about the potential consequences of whistleblowing, facilitating their decision making.

⁸ Similarly, the European Union recently passed regulation that encourages whistleblowers to first report issues to their employer and only report to regulators if the issue cannot be resolved within the firm.

2. Institutional background, related research, and research question

2.1. The False Claims Act and Qui Tam Provisions

The False Claims Act (FCA) is an American federal law and the government's primary tool to combat fraud in connection with federal programs and expenditures. It was enacted by Congress in 1863 in response to concerns that suppliers of goods to the Union Army during the Civil War defrauded the Army. The FCA, often referred to as "Lincoln's Law," originally stipulated that any person who knowingly submitted false claims to the government was liable for double the government's damages plus a penalty of \$2,000 for each false claim.

The FCA was revamped in 1986, primarily due to abuses in the defense contracting industry. These amendments significantly expanded the role of whistleblowers, increased financial incentives, and reduced barriers to bringing actions against persons or entities alleged to have submitted fraudulent claims to the federal government. The changes also included an increase in the damages from double to treble damages and an increase in the penalties from \$2,000 to a range of \$5,500 to \$11,000 (Engstrom, 2014).

Since the 1986 amendments, the FCA has become the federal government's most effective and successful tool in combating fraud in federal spending. From 1986 to 2018, the federal government recovered more than \$59 billion as a result of lawsuits filed under the FCA (DOJ, 2018a). Nearly one-half of all recoveries, and the majority of the largest settlements, have come from healthcare related cases. The FCA also has been effective in combating fraud in other industries, such as defense, energy, construction, housing, natural disaster recovery, and other forms of government procurement.

The FCA allows private persons to file suit for violations of the FCA on behalf of the government. A suit filed by an individual on behalf of the government is known as a "*qui tam*"

action, and the person bringing the action is referred to as a “relator.”⁹ In practice, most of the FCA enforcement efforts fall under this *qui tam* provision (this is also referred to as the FCA’s whistleblower provision).

The *qui tam* provisions of the FCA were motivated by the recognition that the government lacks the information, as compared to private citizens, to pursue all those who submit fraudulent claims to the government. These private citizens can be employees, suppliers, customers, or shareholders of the company allegedly defrauding the government, among others. Accordingly, citizen whistleblowers have proven to be a vital resource for the government by bringing to light evidence of fraud that would have otherwise have gone undetected. For instance, from 1986 to 2018, 17,800 FCA enforcement cases were investigated, of which 12,643 (71%) were initiated by whistleblowers, and whistleblowers have been paid upwards of \$7 billion in statutory rewards for filing FCA cases on behalf of the federal government (DOJ, 2018b).

2.2. *The enforcement process for qui tam cases*

The enforcement of *qui tam* cases consists of five primary steps (DOJ, 2017): 1) the filing of the lawsuit by a whistleblower with a court, 2) the DOJ investigation of the lawsuit’s claims, 3) the DOJ’s decision to join the case, 4) the legal proceedings after this decision (either with the DOJ if the DOJ decides to join, or if not, then the whistleblower can pursue the case without the DOJ), and 5) the conclusion of the case, typically marked either by a settlement or no settlement. Figure 1, adapted from Heese and Pérez-Cavazos (2019), shows the timeline of the typical FCA *qui tam* enforcement process, and the average time spent on each step for our sample of FCA lawsuits.

⁹ The term “*qui tam*” is an abbreviation of the Latin phrase “*qui tam pro domino rege quam pro se ipso in hac parte sequitur*”, which means “[he] who sues in this matter for the king as well as for himself.”

– Insert Figure 1 here –

The FCA includes the following provisions to discourage opportunistic plaintiffs and minimize the chance of frivolous lawsuits: (i) a “first-to-file” provision precludes claims that mirror a previously filed lawsuit; (ii) a bar on claims related to an already existing enforcement action; and (iii) a bar on claims previously disclosed publicly.

A *qui tam* whistleblower can initiate a lawsuit by filing a complaint on behalf of the government with a court. This complaint is “under seal” wherein only the government is informed of the lawsuit. The purpose of the seal is to permit the government to conduct a covert investigation without the defendant’s knowledge.¹⁰ If whistleblowers violate the seal requirements (e.g., by publicly discussing the case), the court can dismiss the case (Hoyer, 2013). Next, the DOJ opens an investigation into the claims in the lawsuit, and investigates the claims together with the allegedly defrauded agency. Investigations typically include interviews and statements from the whistleblower and other witnesses, and obtaining the defendant’s records through the subpoena process. The DOJ investigations are quite time-consuming. While the DOJ and agency initially have 60 days for their investigation, they can ask the court for an extension. During the length of the investigation, the case is kept under seal. Each extension request grants an additional six months for the investigation, and most cases remain under seal for about two years (DOJ, 2011; see Figure 1).

At the end of an investigation, the DOJ together with the industry-specific agency will make a decision on whether to join the case (or “to intervene”) or to decline joining the case (see Heese et al., 2019 for a study examining DOJ selection of FCA lawsuits). In the latter case,

¹⁰ Companies can become aware of the fraud allegation while the investigation is ongoing through other means, for instance, when the company receives a subpoena for records, or if investigators interview the employees of the company.

the *qui tam* whistleblower still has the option to proceed on his own without the DOJ's help.¹¹ At the end of this stage, the case is unsealed and proceeds to the next step.

The next step in the *qui tam* process involves active litigation. At this time, the whistleblower's complaint must be served to the defendant within 120 days, and the defendant is obliged to file an answer to the complaint within 20 days of receiving it. The case then proceeds through various phases such as discovery (when the defendant is required to disclose any and all information that is essential to the case), trial, and any appeals. The entire litigation process can span several years (1.3 years for our sample lawsuits, as shown in Figure 1). At any point in the *qui tam* process, the defendant also has the option to settle the case. A company that chooses to settle can also be required to enter into a Corporate Integrity Agreement to allow for ongoing government oversight. Further, it can be held liable for criminal penalties in the form of fines, asset forfeiture, jail time, and, in most extreme cases, a bar from future government contracting.

Qui tam whistleblowers stand to gain financially from successful lawsuits; however, the gain depends on the DOJ's intervention decision. If the DOJ declines intervention and the whistleblower continues on his own, then a successful whistleblower earns between 25% and 30% of any recovery; if the DOJ intervenes, then a successful whistleblower keeps only 15% to 25%. The higher payoffs in the former case are designed to provide whistleblowers with incentives to pursue the lawsuit in the event that the DOJ declines intervention.

2.3. Related research and research objective

The literature defines "whistleblowing" as the disclosure by either former or current employees of alleged illegal, immoral, or illegitimate practices that are under the control of the employer (Miceli and Near, 1985). While employees are likely to have the greatest

¹¹ According to the DOJ, it intervenes in approximately 25% of all cases (DOJ, 2011).

opportunities in identifying corporate wrongdoings, whistleblowing can come from sources external to the firm as well.¹² Using a sample of 216 fraud cases between 1996 and 2004, Dyck et al. (2010) find that employees form the most important source of information (17% of the cases), followed by non-financial market regulators (13%) and the media (13%). The SEC and auditors only account for 7% and 10% of the cases, respectively. They conclude that in general whistleblowers face weak incentives and do not stand to gain much from revealing wrongdoings, especially employees, who “seem to lose outright from whistleblowing.” Survey evidence supports this finding (Brickley, 2003; Zingales, 2004).¹³ To reduce these costs for whistleblowers, whistleblower programs increasingly employ cash-for-information schemes that provide financial rewards for whistleblowers.

Proponents of these schemes argue that whistleblowing intentions are guided by a sense of loyalty to the organization, and financial incentives by a regulator are likely to be a potent tool to influence whistleblowing activity (Leeds, 1963; Xu and Ziegenfuss, 2008; Pope and Lee, 2013).¹⁴ Even though a whistleblower may benefit himself from reporting the wrongdoings via receiving a financial reward, he intends to benefit persons or organizations other than himself, consistent with a “prosocial-behavior” argument (e.g., Dozier and Miceli,

¹² Prior literature has documented consequences for firms targeted by employee whistleblowers. For instance, Bowen et al. (2010) find that firms subject to whistleblowing allegations face subsequent negative consequences (such as negative market reactions, earnings restatements and shareholder lawsuits), and such firms that were exposed by the press were more likely to make subsequent improvements in corporate governance. Call et al. (2017) document that whistleblower involvement is associated with higher monetary penalties for targeted firms and employees, and with longer prison sentences for culpable executives. Whistleblower reports have also been shown to deter financial misreporting and tax aggressiveness, a reduction in the likelihood of accounting fraud following the passage of the DFA’s whistleblower incentive program, and a decrease in abnormal accruals following the passage of the DFA (Wilde, 2017; Berger and Lee, 2019; Wiedman and Zhu, 2017).

¹³ For instance, in a 1992 survey of 1,500 federal workers, Zingales (2004) finds that 25 percent of employees reported that they experienced verbal harassment and intimidation, 20 percent were shunned by co-workers and managers, 18 percent were assigned to less desirable duties, and 11 percent were denied a promotion. Similar evidence was found by Brickley (2003), who conducted a review of 200 whistleblower complaints filed with the National Whistleblower Center in 2002; he reported that about 50% of whistleblowers were fired after they reported misconduct, and the other 50% were subjected to various on-the-job harassment and disciplinary actions.

¹⁴ Xu and Ziegenfuss (2008) find that the likelihood of internal auditors reporting wrongdoing increases when they receive incentives by their employing firm, and Pope and Lee (2013) find similar results from a study using MBA students.

1985; Staub, 1978). Under this view, cash-for-information programs can arguably compensate whistleblowers for undertaking the risk of reporting wrongdoing to the authorities. Evidence of significant underreporting of wrongdoing supports the implementation of financial incentives to reward whistleblowing activity (Ethics Resource Center, 2013).

In contrast, critics argue that whistleblowers are often disgruntled employees that waste resources of regulators and accused firms alike, and lodge baseless allegations (Gobert and Punch, 2000). For example, Miceli and Near (1992) describe that whistleblowers often misjudge the situation and hence file trivial or frivolous complaints. Bok (1980) discusses that whistleblowers may seek “self-aggrandizement and publicity, and hope for revenge for past slights or injustices.” It is also possible that some employees may want to misuse their protected “whistleblower” status to avoid discharges or disciplinary proceedings (Anechiarico and Jacobs, 1996; Schmidt, 2005). Under this “antisocial-behavior” view, cash-for-information programs can foster opportunistic motivations among employees to file meritless allegations that they might not have filed otherwise, generating costs for regulators and the accused firms (Bok, 1980; Gobert and Punch, 2000; Schmidt, 2005).

In this study, we examine the merits of cash-for-information programs by studying how whistleblowers behave under these programs and how firms respond to whistleblowing. In particular, we conduct an in-depth analysis of nearly 2,000 lawsuits filed under the FCA during the period 1994 to 2012, and examine whether whistleblowers’ behaviors are more consistent with the prosocial-behavior view or the antisocial-behavior view. We also study both the short- and long-term career outcomes for whistleblowers under these regimes, to assess the impact of these financial incentives on the overall costs to whistleblowers.

3. Data and sample characteristics

We obtain the list of whistleblower lawsuits from Engstrom (2013), who procured it through a series of requests to the DOJ under the Freedom of Information Act (FOIA). This dataset contains all FCA lawsuits initiated by whistleblowers from 1994 to 2012, including against both private and public defendants.¹⁵ For each lawsuit, the data includes the date when the whistleblower filed the lawsuit with a court, the accused firm, and the allegedly defrauded federal agency. We next obtained the associated court documents for these lawsuits from the Public Access to Court Electronic Records (PACER) system and collect data on the nature of the fraud, the various characteristics of the whistleblowers involved in revealing the fraud, and the details of the firm and its behavior towards the complaint and the whistleblower.¹⁶

Our sample comprises only those allegations where the whistleblower filed a lawsuit in court. Thus, we do not observe whistleblower allegations that were brought up internally and the whistleblower did not pursue the case by reporting externally; perhaps because many of these cases were successfully resolved internally (see Figure 2 for our sample criterion).

– Insert Figure 2 here –

Table 1, Panel A describes the entire dataset as well as the samples that we use for various analyses. The initial dataset comprises 5,611 lawsuits, involving 6,719 whistleblowers and 7,450 unique whistleblower-lawsuit observations.¹⁷ From this dataset, we exclude all

¹⁵ Roughly 3,000 (2,500 during our sample period) *qui tam* lawsuits remain under seal and fall into one of three categories (Engstrom, 2013). First, a substantial portion of the cases remain under seal pending the completion of investigations. Second, a small fraction is comprised of closed cases that could involve national security concerns. According to DOJ attorneys (Engstrom, 2013), the rest of the cases are likely closed cases that remained sealed for a variety of reasons, including neglect by the judge to unseal the case, accidental failure by the relevant DOJ attorney to request unsealing upon case termination, or a successful whistleblower effort to persuade the trial judge to keep the case sealed, typically because he or she remains employed by the company named in the lawsuit.

¹⁶ Three different teams of research assistants reviewed all lawsuits to verify the accuracy and credibility of the final dataset. Remaining issues were resolved by us. See Appendix B for some examples of fraud allegations made by employee whistleblowers based on excerpts from the corresponding court documents.

¹⁷ One lawsuit may involve more than one whistleblower accusing a defendant firm, explaining why the number of unique whistleblowers exceeds the number of unique lawsuits.

lawsuits for which we do not have access to the court filings obtained from the Public Access to Court Electronic Records (PACER) system, which leaves us with 1,927 unique lawsuits involving 2,319 unique whistleblowers, and comprising 2,451 unique whistleblower-lawsuit observations. This sample comprises 2,219 unique public and private firms. To identify public defendants, we manually review the court docket filings associated with each lawsuit to match the name of each defendant to a GVKEY identifier.

To motivate our focus on employee whistleblowers, we explore the sample composition of the 2,451 whistleblower-lawsuit observations by type of whistleblower. As shown in Table 1, Panel B, employee whistleblowers are by far the most common whistleblower in our sample with approximately 70% of the observations related to employee whistleblowers. Employee-initiated lawsuits have an average settlement of about \$16 million per lawsuit, with total settlements across all employee-initiated lawsuits amounting to over \$7 billion. Some other key categories of whistleblowers include customers (the second largest category with 4.5% of all observations), contractors, business partners, external auditors, competitors, and suppliers. Once we eliminate these non-employee whistleblowers, we are left with 1,335 lawsuits involving 1,635 employee whistleblowers. This sample comprises 1,666 whistleblower-lawsuit observations, and covers 1,540 unique private and public firms. We refer to this sample as the “full sample.” Once we eliminate lawsuits pertaining to private firms, we are left with 313 lawsuits against 220 unique public firms. These lawsuits are filed by 389 unique employee whistleblowers and comprise 391 whistleblower-lawsuit observations. We refer to this sample as the “public firms sample.” We use the full and public firms sample for the descriptive Tables 2, 4, and 7. In addition to the descriptive analyses, we also conduct regression analyses for the sample of public firms for which we have available data, further reducing our sample to 374 whistleblower-lawsuit observations. We use this sample for our regression analyses in Tables

3, 5, 6, 8, and 9. In these regressions, we control for profitability (using ROA), size (using the logarithm of total assets), risk (using leverage), and M&A activity.¹⁸

Table 1, Panel C describes the distribution of the full and public firms samples over the sample period. For both samples, the number of lawsuits picked up from 2002 onwards.¹⁹ The lawsuits in our sample indicate 23 agencies that were allegedly defrauded by our sample firms (see Table 1, Panel D). The two agencies with the most cases (for both the full and the public firms samples) include the Department of Health and Human Services (comprising 65% of the full sample and 60% of the public firms sample), and the Department of Defense (comprising 14% for the full sample and 22% for the public firms sample).

– Insert Table 1 here –

In Table 2, we provide additional statistics on the public firms sample. In Panel A, we tabulate the industry composition of the alleged public firms (i.e., the 220 unique firms corresponding to the 391 whistleblower-lawsuit observations) in our sample using Fama-French industrial classifications.²⁰ The bulk of these firms (about 20% of the sample) are in the Healthcare, Medical Equipment and Drugs sector. Many firms are also concentrated in Money and Finance (12.7%), Chemicals (11.4%), and Wholesale and Retail (9.1%). Panel B provides statistics on the control variables. Our sample firms are on average relatively large (compared to the average Compustat firm), are unprofitable, and involved in M&As relatively often.

– Insert Table 2 here –

¹⁸ Appendix A provides a detailed description of all variables used in the study.

¹⁹ The number of allegations drops significantly in 2012 (the last year in our sample) because many cases were still under seal at the time of the FOIA requests.

²⁰ The number of unique firms are less than the number of whistleblower-lawsuit observations because in some cases there were multiple whistleblowers who were part of a lawsuit against the same firm.

4. Empirical methodology and results

In this section, we examine the merits of cash-for-information programs by studying how whistleblowers behave under these programs, how firms respond to whistleblowing, and the career consequences for employee whistleblowers. In particular, we examine four key issues. First, we present statistics on case outcomes. Second, we examine the relation between case outcomes and the decision to report internally first, and how this decision is associated with firm and whistleblower characteristics. Third, we examine firms' responses to allegations and retaliations against whistleblowers, and how these vary cross-sectionally with firm and whistleblower characteristics. Finally, we analyze the short- and long-term career consequences for employee whistleblowers.

4.1. Case outcomes and whistleblower characteristics

Our first set of analyses provides evidence on the case outcomes as well as the distribution of employee whistleblowers based on their gender and rank for our sample firms. Table 3 presents the descriptive statistics for the full sample (private and public) and for public firms only. The distributions are generally similar across the full and public firm samples. To keep the discussion concise, we discuss the results for the full sample and note any major differences for public firms.

The average settlement amounts to \$15.6 million. However, less than 30% of all lawsuits result in a settlement, suggesting that the majority of allegations lack merit. Regarding the characteristics of employee whistleblowers, we find that men file approximately 60% of lawsuits.²¹ Next, we consider the ranks of whistleblowers in our sample. We categorize all C-suite executives, such as a CEO, COO, CFO, Chairman, President, and Executive Vice

²¹ While we cannot verify this due to lack of data, this could be reflective of the distribution of men versus women in our sample firms. According to the U.S. Department of Labor, as of 2016, almost 47% of U.S. workers are women (DOL, 2016).

President as upper management. We group positions that include the designations of “manager”, “supervisor”, “director” under middle management, and designate all others as rank-and-file.²² When not obvious, we read more about the position of the employee to determine his or her rank in the firm. We find that the majority of the lawsuits come from rank-and-file employees (about 59%), followed by middle management (27%). A small percentage (4%) of the lawsuits come from upper management. Not surprisingly, the bulk of the settlement amounts in the sample (almost 60%) also can be attributed to rank-and-file employees.

The distribution of the percentage of lawsuits successfully settled are similar across whistleblower ranks in the full sample: 25%, 28% and 33% of lawsuits are settled for rank-and-file, middle and upper management, respectively. This is slightly different for public firms: 24% and 32% of lawsuits are settled for rank-and-file and middle management, respectively; however, only 17% of lawsuits filed by upper management are settled. For the full sample, the average settlement per lawsuit is also similar across different ranks – the highest average settlement being for upper-management whistleblowers (\$23 million), followed by middle management and rank-and-file employees (about \$17 million for each category). Patterns and magnitudes are quite different for the sample of public firms – rank-and-file employee whistleblowers have the highest average settlement at \$46 million, followed by middle and upper management at \$22 million and \$19 million, respectively. These numbers suggest that lower level employees also possess valuable information related to corporate misconduct.

The above evidence suggests that most lawsuits do not appear to have merit, potentially confirming critics’ views of cash-for-information programs. Whistleblowers are likely to be lower ranked employees, who perhaps have more detailed information that can help uncover

²² “Director” does not refer to a member of the board of directors; instead these are designations such as “Director of Operations.”

misconduct. The lower proportion of upper management whistleblowers may be at least partly explained by the following factors. First, the number of upper management employees is significantly less than the number of rank-and-file employees. Second, it is more likely that upper management employees are either part of the fraud or attempting to solve it internally. Third, upper management employees have higher compensation. Thus, the benefits offered by cash-for-information schemes might not be large enough to incentivize them to come forward.

The volume, settlement rate, and average settlement per case conditional on whistleblower rank suggests that, especially in the case of public firms, rank-and-file employees possess credible information that can help uncover frauds, motivating deeper analyses across employee ranks. In the next section, we conduct additional analyses to further examine these inferences.

– Insert Table 3 here –

4.2. Whistleblower reporting choices

In this section, we explore the factors influencing employees' decisions to report alleged wrongdoings internally first, versus directly reporting the case to external regulators. Critics of cash-for-information programs argue that whistleblower complaints that are reported externally are more likely to be frivolous and unreliable, and reflect whistleblowers' intent to seek publicity and get a quick payday. Accordingly, under this view, we should observe differential case outcomes depending on whether an allegation was directly reported externally versus reported internally first. The statistics in Table 4, Panel A show that a significantly larger percentage of cases are reported internally. Further, a significantly larger percentage of cases not reported internally first get settled (approximately 30% of these cases settle) as compared to cases reported internally first (approximately 25% of these cases settle). In addition, in contrast to the critics' view, the average settlement is not statistically different across

complaints that were initially reported internally or externally (the average settlement is approximately \$15 million for the full sample and \$30 million for the public firms), suggesting that case merit cannot be predicted merely by the whistleblower's reporting choice. To examine this question more formally, we also estimate the following OLS regressions at the whistleblower-lawsuit level for our sample of public firms (all subscripts are suppressed):

$$Y = a_0 + a_1 \text{Internal Reporting} + \text{Controls} + \text{Year FE} + \text{Agency FE} + \epsilon, \quad (1)$$

where Y is either *Settled Lawsuit*, an indicator variable equal to 1 if a case resulted in a settlement, and 0 otherwise, or *Settlement Amount*, the natural logarithm of one plus the settlement amount. *Internal Reporting* is equal to 1 if the employee first reported the allegation internally before filing the FCA lawsuit, and 0 otherwise. *Controls* include *Leverage* (long-term debt scaled by total assets) to control for firm risk, *ROA* (net income scaled by total assets) to capture performance, and the logarithm of total assets to control for firm size. We also include an indicator variable, *M&A*, which equals 1 if a firm was involved in a merger and acquisition, and 0 otherwise, to control for any capital market pressures faced by a firm (Bowen et al., 2010). We include defrauded agency fixed effects to control for any government agency related factors (such as resources for fraud enforcement) that may affect the lawsuit outcome, and year fixed effects to capture any inter-temporal changes in the enforcement of FCA laws or in whistleblower norms.

Table 4, Panel B presents the results from these regressions. We find no significant differences in the likelihood of a case being successfully settled or the settlement amount based on whether the whistleblower chose to report internally or externally. Thus, conditional on the fact all of these cases were eventually reported to regulators, our results do not support the conjecture that externally reported cases are more likely to be frivolous than lawsuits first reported internally. Instead, regulators do not appear to put less weight on cases that are

reported by whistleblowers externally. We further examine the court documents to understand the reasons provided by whistleblowers as to why they decided to directly report to external regulators. In almost 90% of the lawsuits, the whistleblowers did not provide a reason. Among those that did offer a reason, fear of retaliation was the most cited cause for not reporting internally first (9.4% of cases), followed by the supervisor being involved in the fraud (0.5%) and the external parties already being aware of the fraud (0.4%).

Next, given our earlier evidence on the volume of allegations across employee ranks, we examine whether employee rank is associated with the success of a case, estimating the following regressions:

$$Y = a_0 + a_1 \text{Rank and File} + a_2 \text{Middle Management} + a_3 \text{Male} + \text{Controls} + \text{Year FE} + \text{Agency FE} + \epsilon, \quad (2)$$

where Y is either *Settled Lawsuit* or *Settlement Amount*. *Rank and File* and *Middle Management* are indicator variables equal to 1 if the whistleblower is a rank-and-file employee or part of middle management as described in the FCA lawsuit respectively, and 0 otherwise (the baseline case being upper management employees). *Male* is an indicator variable equal to 1 if the whistleblower is described as being male in the FCA lawsuit, and 0 otherwise. *Controls* include *Leverage*, *ROA*, *Size* and *M&A*. As shown in Table 4, Panel B, we find that cases involving rank-and-file employees as well as middle management are more likely to result in a settlement and have higher settlement amounts.

– Insert Table 4 here –

Next, we examine in more detail whether firms where whistleblowers decided to report internally first versus externally are systematically different from each other. Specifically, we examine whether these firms differ in their control systems that help them to handle whistleblower complaints. For example, improved employee relations could increase

employees' willingness to report issues internally (Stubben and Welch, 2019). We examine three types of control system features: strength of internal controls, employee relations, and board independence. We estimate the following regression for the sample of public firms (all subscripts are suppressed):

$$\begin{aligned} \text{Internal Reporting} = & a_0 + a_1 \text{Weak Internal Controls} + \\ & a_2 \text{Strong Employee Relations} + a_3 \% \text{Independent Directors} + \text{Controls} + \\ & \text{Year FE} + \text{Agency FE} + \epsilon. \quad (3) \end{aligned}$$

Internal Reporting is as defined before. *Weak Internal Controls* is computed using the fitted value of internal control weakness obtained from estimating the model developed by Doyle et al. (2007). We estimate these values using the full Compustat universe. This variable takes the value of 1 if the firm belongs to the decile with the highest likelihood of an internal control weakness in the full Compustat universe, and 0 otherwise (see Bowen et al., 2010).²³ *Strong Employee Relations* is computed using the Environmental, Social, and Governance (ESG) statistics compiled by Morgan Stanley Capital International (MSCI). The database contains indicators that identify positive and negative employee relations practices. Positive employee relation practices include union relations, profit sharing, employee involvement in governance, employee health and safety, supply chain labor standards, human capital development, labor-management relations, non-controversial sourcing, and best-in-class management performance. Negative employee relation practices include union relations concerns, workforce health and safety concerns, supply chain controversies, child labor controversies, labor management controversies including wrongful termination, and restrictions of employee rights. *Strong Employee Relations* takes the value of 1 if the count of employee strengths is

²³ The advantage of using predicted internal control weaknesses instead of actual internal control weaknesses is that it allows us to use the full sample from 1994 to 2012 for estimations. Actual internal control weakness data is only available from 2004 onwards.

greater than the count of employee concerns, 0 otherwise. *%Independent Directors* is the proportion of independent directors on the board and is a measure of governance strength (e.g., Brickley et al., 1994).

We expect that if whistleblowers' intentions when reporting directly to regulators are simply to obtain a quick payday or publicity, there should be no systematic differences between the governance characteristics of firms involved in cases that were initially reported internally versus externally. Alternatively, if weak internal governance and relations force an employee to report externally, then we should find that external reports from whistleblowers are associated with their firms having weaker governance, controls and employee relations.

Table 5 reports our results. As shown in column 1 of Panel A, we find that whistleblowers are more likely to report internally first when firms' internal controls and employee relations are stronger, and when the percentage of independent directors is higher. These results indicate that employees' decisions to report internally first are influenced by their firms' governance characteristics.

Building on this insight, we expand model (3) to examine whether whistleblower rank also affects the decision to report internally. As shown in column 2, we find that rank-and-file employees are less likely to report internally as compared to upper management (at the 0.10 level). Two alternatives could explain this pattern. First, it is possible that lower level employees are more attracted by the financial reward given by the bounty scheme. Alternatively, lower level employees might be more sensitive to inadequate whistleblower support processes (or lack of information on these processes), prompting them to report externally more often than upper management.

To separate these two alternatives, we also examine whether the decision of rank-and-file employees to report internally is influenced by a firm's governance characteristics. To that

end, we condense the three control-systems measures into a *Strong Governance* indicator and interact it with *Rank and File*. Strong Governance is equal to 1 if the weak internal controls rank is smaller than the median, if *Strong Employee Relations* equals 1, or if *%Independent Directors* is larger than the median, and 0 otherwise. As shown in column 3, we find that rank-and-file employees are only less likely to report internally in firms with weak governance. Overall, these results do not support the criticism that regulator bounty schemes motivate employees to report externally to get a quick payday at their firms' expense.

In Panel B we conduct a deeper analysis into the various types of internal and external channels used by our sample whistleblowers.²⁴ For both samples, the majority of whistleblowers who report internally first choose to report to top management (34-38%) or their direct supervisor (34-38% of the time). The average settlements per lawsuit for these two internal channels are among the highest, ranging from approximately \$12 million to \$23 million. Other channels include reporting to a colleague, to legal compliance, HR, hotline, and to the internal auditor.

Interestingly, hotlines (made specifically for use by whistleblowers) are very rarely used (about 2-4% of the time). Three explanations are possible for this. First, many private firms may not employ such hotlines as they are not required by law. Second, it is possible that most cases that are reported to the employee hotlines are successfully resolved internally, and hence we do not observe these in our sample of lawsuits (e.g., Stubben and Welch, 2019). Third, Soltes (2019) also finds that there are often barriers to proper functioning of hotlines such as incorrect routing of a whistleblower's request, wrong or incomplete phone number

²⁴ While most whistleblowers use only one internal reporting channel (in about 47% of the cases), it is not unusual for some whistleblowers to employ multiple internal reporting channels prior to reporting externally. As a result, the number of observations for reporting channels used in Table 5, Panel B (1,281) is greater than the number of observations for whistleblowers who chose to report internally first in Table 4, Panel A (897).

provided, broken reporting link, non-functioning websites, and generic third party links.²⁵ Given these challenges, it is possible that whistleblowers rarely use this channel (especially for more serious cases). Thus, hotlines are either very successful in resolving whistleblower complaints internally, or employees do not use this channel much (or use it selectively for less serious cases which can get resolved easily internally). On the other hand, it appears that while whistleblowers are more likely to first report to their direct supervisor, more of these cases are eventually reported externally. One possible inference for this observation is that direct supervisors are not effective enough to help resolve a whistleblower complaint internally. If so, firms can further lower the incidence of whistleblowers reporting complaints externally by strengthening this channel.

Among the external reporting channels, whistleblowers can report straight to courts, to a government agency, or to an external auditor (or use a combination of these). Most whistleblowers (in more than 95% of the cases) choose to go straight to courts, and these cases result in the highest average settlements (\$16-\$30 million). The percentage of cases that are successfully settled are highest with the court system (24%), versus the government agency (0.7%) and external auditor (0%). In unreported analyses, we explore whether whistleblower rank affects the type of reporting channel used. We do not find any distinct patterns – the distribution of the internal and external channels used are similar across employee ranks.

– Insert Table 5 here –

4.3. Firm responses to whistleblower allegations

When an employee reports an issue internally, firms can choose to react to the complaint in several ways. They may open an internal investigation on the issue, try to cover-

²⁵ Soltes (2019) documents that 20% of his sample of 250 firms had impediments that hindered the actual reporting by whistleblowers. He notes that, “some of these obstacles were serious, and effectively locked reporting on the channel altogether.”

up the issue, or simply ignore the complaint. Firms may also retaliate against the employee whistleblower in various ways, such as through harassment, threats, suspension, demotion and even by firing them (Dyck et al., 2010).

Table 6, Panel A describes the various responses and retaliations from the accused firms. The results are similar across the full sample and for public firms. For the majority of the allegations in the sample (60%), firms ignored the issue raised by the whistleblower. These cases were successfully settled 14% of the time. For 10% of the allegations, firms tried to cover-up the issue internally. Only 3% of these lawsuits were successfully settled in court. In a small fraction of cases (6%), firms did open an internal investigation on the issue; only 1% of these cases were settled in court for relatively negligible amounts.

The most common way a firm retaliated against a whistleblower was by firing them (37% of cases). About 12% of these cases were successfully settled. Other significant forms of retaliations include harassment (16%), threats (10%), demotion (6%), and suspension (2.5%). Employee whistleblowers quit in 7% of the cases and had a lawsuit filed against them in 0.4% of the cases. In only 20% of all cases, firms did not retaliate against the whistleblower.

In unreported analyses, we find that firms' responses and retaliations did not vary much based on the rank of the whistleblower who raised the complaints. Most allegations were ignored by the firm, regardless of whether they were filed by rank and file, middle or upper management. For each of the ranks, the smallest proportion of allegations resulted in internal investigations. Employee whistleblowers were also fired in the highest percentage of the allegations (36-40%) followed by being harassed and threatened, regardless of their rank. Thus, it does not seem that firms' behaviors against whistleblowers and their complaints were contingent on the whistleblower's rank.

To better understand whether certain firms are more likely to ignore or cover up whistleblower complaints and retaliate against employees, we examine the association between firms' responses and retaliations and their governance quality, internal controls and employee relations in a regression for our sample of public firms. We also examine if firms' responses and retaliations vary with the rank and gender of employee whistleblowers. We estimate the following regressions at the whistleblower-lawsuit level:

$$Y = a_0 + a_1 \textit{Weak Internal Controls} + a_2 \textit{Strong Employee Relations} + a_3 \% \textit{Independent Directors} + \textit{Controls} + \textit{Year FE} + \textit{Agency FE} + \epsilon. \quad (4)$$

The dependent variable Y is either *Internal Investigation*, an indicator equal to 1 if the firm conducted an internal investigation in response to an employee whistleblower's internally reported allegation, and 0 otherwise (i.e., if they were ignored or covered up), or *No Retaliation*, an indicator equal to 1 if the firm did not retaliate against an employee in response to the employee's allegation, and 0 otherwise. All other variables are as defined before.

As shown in Table 6, Panel B, firms are significantly more likely to open an internal investigation when they have stronger employee relations. Thus, firms where employees have stronger rights are more likely to have internal investigations once a whistleblower raises a complaint. Further, we also find that firms are more likely to open an internal investigation when the whistleblower is a rank-and-file employee or middle management. This is consistent with our finding in Table 3 that these employees are likely to have critical information regarding corporate wrongdoings. Moreover the evidence in this test suggests that companies are aware that rank-and-file employees hold valuable information. Interestingly, firms are more likely to open internal investigations for female whistleblowers. In column 3, we interact *Strong Governance* with *Rank and File*. We find that firms are only more likely to start an internal investigation for cases filed by rank-and-file employees if their governance is stronger.

Panel C documents the results of the association between no retaliation against an employee whistleblower and firm and whistleblower characteristics. We find that firms are less likely to retaliate if they have a higher percentage of independent directors. We also find that firms are less likely to retaliate against rank-and-file employees as compared to upper management, but find that this effect is concentrated in strong governance firms. A possible explanation for this finding is that rank-and-file employees may on average be better protected by anti-retaliation provisions. For example, it may be harder to justify firing a rank-and-file employee who performs more routine functions as compared to upper management, and any severe action against them may be more likely to be perceived as a retaliation against the whistleblower resulting in penalties for the firm.

In summary, firms' control systems are significantly associated with firms' responses and retaliations. The inferences from this section are intuitive given our results in the prior section that employees are more likely to report their complaints internally when their firms have stronger employee relations, governance and internal controls. Firms with stronger governance are more likely to conduct internal investigations for allegations – and even though they may not be able to prevent some cases from being reported externally – these cases have very low settlement amounts, indicating that the cost for the firm was relatively low. The findings in this section provide additional evidence that employee whistleblowers' decisions not to report internally are often justified given the weaker responses to complaints and more severe retaliations from firms with weaker corporate governance.

– Insert Table 6 here –

4.4. Consequences for whistleblowers

Regulators often worry that employees who observe misconduct may not share their information, because they fear the negative consequences of blowing the whistle. Despite the

inclusion of anti-retaliation provisions in most laws, Dyck et al. (2010) report that over 82% of the whistleblowers in their sample were fired, quit, or were demoted. They summarize this finding by stating that “given these costs, the surprising part is not that most employees do not talk, but that some talk at all” (Dyck et al. 2010, p.2245). While these findings appear to be dooming, they are limited in three dimensions. They are derived from a sample of only 26 cases, they mostly focus on the short-term consequences that the whistleblower suffered, and they include a large fraction of whistleblowers that did not file under a cash-for-information program. In this section, we examine the consequences of blowing the whistle for our sample of employee whistleblowers. Our first analysis uses the information contained in the lawsuits to examine the short-term consequences. Our second analysis examines the longer term career consequences for whistleblowers working for publicly traded firms.

4.4.1. Short-term consequences

The descriptive evidence in Table 6, Panel A reveals that almost 80% of the whistleblowers mentioned that they suffered at least one form of retaliation. While identifying some forms of retaliation can be subjective as it depends on the whistleblower’s perspective (e.g., threats or harassment), more than 35% of whistleblowers report being fired, 2.5% report being suspended, and 0.4% were sued by the firm.²⁶ We also find that the probability of reaching a settlement was substantially higher in cases where the whistleblower was fired, with 12% of those cases ending with an average settlement of \$8.3 million (\$16.8 million for publicly traded firms). In those cases, the expected benefit for the whistleblower is approximately \$200,000 (\$406,000 for public firms), representing four (eight) times of the

²⁶ While we carefully code the information contained in each of the lawsuits, it is important to note that the consequences reported in a lawsuit are likely subject to reporters’ biases. More specifically, lawsuits are prepared from the perspective of employees and they might perceive to have incentives to paint accused firms in the worst possible light.

average annual compensation of the median employee working for a publicly traded firm.²⁷ While these benefits seem large, it could take a long time to collect them. Dyck et al. (2010), for example, provide examples where whistleblowers had to wait up to 10 years to collect the reward. In our sample, the average whistleblower receives the reward 4 years after the filing date, and 75% of all whistleblowers receive the money within 5 years.

The evidence from this analysis suggests that blowing the whistle carries costly consequences at the current firm, with approximately 45% of employees leaving the firm shortly thereafter, either by being fired or pushed to quit. However, the average benefits collected by employees who were terminated mitigate and in some instances fully eliminate the losses associated with the job loss.²⁸ Especially for rank-and-file employees the expected benefits appear to be larger than the costs associated with blowing the whistle. In contrast, the expected benefits may not be large enough to incentivize upper management to come forward. Overall, these results further confirm the importance of cash-for-information programs to mitigate the costs associated with whistleblowing.

4.4.2. Medium and long-term consequences

As shown in the previous analysis, one of the primary consequences of blowing the whistle is job loss. Prior work suggests that, in addition to losing the current job, whistleblowers suffer from a long period of unemployment as they are unable to find another job. To examine these conjectures, we hand-collect data about the career outcomes of employee whistleblowers from a widely used professional networking site.²⁹ We find the profiles of 89 employee

²⁷ We estimate the expected monetary benefits as the product of the probability of reaching a settlement, the average settlement amount, and the average fraction of recovered amounts collected by the whistleblowers in our sample (12% x \$8.3 million x 20%). As mentioned earlier, the average annual compensation of the median employee working for a publicly traded firm amounted to \$50,603 in 2018.

²⁸ As we describe in the following section, the average unemployment gap for whistleblowers is approximately 1 year.

²⁹ A drawback of relying on data from a networking site to examine career consequences is that all information is voluntarily provided by the individual and is not independently verified.

whistleblowers from our sample of publicly traded firms and examine the career consequences with respect to the immediate job after working for the accused firm (“next job”) and the whistleblowers’ most recent job (“latest job”). Table 7 presents the results from this analysis. We find that the average employment gap (i.e., the period of time between the job at the accused firm and the next job) is 1.1 years. When considering the different ranks, upper management has, on average, no gap between the accused firm and their next job, whereas rank-and-file employees have the longest gap at 1.4 years.³⁰

We also find that the whistleblower’s next job is better than its job at the accused firm in 31% of cases, equivalent in 21%, worse in 10%, and the whistleblower becomes self-employed in 21% of the cases. In 16% of the cases the profile does not provide enough information to assess the next job. Interestingly, while these overall statistics apply to rank-and-file and middle management employees, they are very different for upper management. For upper management, their next job is better or equal 0% of the time, is worse 33% of the time, and the whistleblower becomes self-employed 50% of the time.

Whistleblowers can also suffer costs if they have to move to another state or change industries.³¹ We find that 16% of whistleblowers moved states for their next job, and 35% changed industry. To better understand the long-term consequences of blowing the whistle, we examine the whistleblowers’ most recent job. In terms of timing, the average whistleblower began working at their latest job 8 years after filing the accusation. In 58% of the cases, the whistleblower’s latest job is better or equal to the job at the time of the accusation. In 12% of the cases the whistleblower had a worse job, and in 16% the whistleblower was self-employed.

³⁰ We have very few observations for upper management whistleblowers (6 employees). So while these observations are interesting, we caution the reader to interpret the consequences for this rank of whistleblowers with this consideration in mind.

³¹ For example, Dyck et al. (2010) describes some of the costs associated with whistleblowing as being forced to leave the hometown in the years following the allegation.

In 15% of the cases, we do not have enough information about the latest job. In terms of geographical moves and industry changes, we find that 24% moved to another state and 42% changed industry. These changes could also be due to normal labor movements in the economy.

Overall, this evidence suggests that while the majority of whistleblowers cease working at their current job, they are able to find at least an equivalent job within a year. In addition, even interpreting self-employment as a negative outcome, most whistleblowers do not appear to suffer extreme negative long-term career consequences (particularly the rank-and-file and middle management employee whistleblowers).

– Insert Table 7 here –

5. Conclusions

In this paper, we examine the behavior of whistleblowers and firms under cash-for-information programs. These programs are increasingly employed by regulators to incentivize whistleblowers to report fraud to regulators. However, research on these programs is limited. Using nearly 2,000 lawsuits filed under the False Claims Act during the period 1994 to 2012, we examine whether the actions of employee whistleblowers under cash-for-information regimes are more consistent with employee loyalty and duty towards the firm (consistent with “prosocial” behavior), or with ulterior motives of personal gain (consistent with “antisocial” behavior), and the immediate and long-term career consequences for employee whistleblowers under these regimes.

We observe that in half of the cases, whistleblowers filed the lawsuit with a court without reporting the issue internally first. Moreover, approximately 30% of the lawsuits resulted in a settlement, suggesting that the majority of allegations lack merit. At first glance, these statistics seem supportive of critics’ views that a large number of whistleblowers appear to file cases in hope of a financial reward.

We conduct three analyses to explore the validity of this view. First, we do not find a significant relation between the reporting decision and case outcome, suggesting that the cases directly reported to the authorities do not necessarily imply less merit. Second, we find that stronger governance, internal controls, and employee relations significantly increase employees' willingness to report internally. Third, we find that firms ignore about two thirds of all allegations and only initiate internal investigations in about 6% of all cases. Public firms that have stronger employee relations are more likely to conduct an internal investigation. In addition, firms typically retaliate against employees via firing (in more than one third of all cases), harassment (about 16% of all cases), threats (about 10% of all cases), and demotions (about 6% of all cases). In only 21% of all cases, the firm does not retaliate against an employee whistleblower. The likelihood of retaliation is also higher if the percentage of independent directors is lower, suggesting that stronger governance reduces the likelihood of retaliation. Overall, we interpret these findings as being more consistent with prosocial employee behavior, and argue that cash-for-information programs appear to reward employees for the costs they bear in providing regulators with information.

We next explore the career consequences that employee whistleblowers face in organizations. While we descriptively find that one third of employees were fired if they reported the issue internally first, we find that particularly for rank-and-file employee whistleblowers, the expected cash rewards from the result of the lawsuits were more than likely to compensate for their personal losses. When considering longer-term consequences, we find similar evidence that rank-and-file and middle management employee whistleblowers end up with positions that are equivalent to or better than their position at the accused firm more than 50% of the time, and they are able to find such positions within a year of being fired.

Collectively, based on the information we are able to collect, the career consequences for these whistleblowers do not appear as dismal as documented in prior research.

Our study has important implications for scholars, regulators, corporations, and employees. The academic literature has documented the importance of whistleblowers in detecting corporate fraud (e.g., Dyck et al., 2010; Call et al., 2017). However, considerable controversy remains on the merits of cash-for-information schemes in whistleblower programs and how they incentivize employee whistleblowers' actions (e.g., Dozier and Miceli, 1985; Gobert and Punch, 2000). Our paper sheds light on this debate by providing large sample evidence on employee whistleblowers' as well as firms' behaviors under the FCA cash-for-information program. Our evidence can be useful for regulators in designing optimal bounty programs and guidelines shaping employee reporting guidelines. Firms can also benefit from this evidence in reevaluating their existing compliance and governance systems to ensure that lower level employees can have a safe and responsive corporate environment to call out unethical behavior. Finally, our evidence on career consequences can allow individuals to make more informed decisions regarding blowing the corporate whistle.

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Appendix A. Variable definitions

The following variables are constructed using data from a proprietary dataset of whistleblower lawsuits obtained through FOIA requests [FOIA], the actual court documents pertaining to these lawsuits obtained from the Public Access to Court Electronic Records system [PACER], Compustat [C], Compustat Segments [CS], Institutional Shareholder Services Directors [ISS], and MSCI ESG KLD STATS [KLD].

Variable	Definition
Dependent Variables	
Settled Lawsuit	Indicator equal to 1 if the lawsuit resulted in a settlement, 0 otherwise. [FOIA]
Settlement Amount	Logarithm of one plus the settlement amount. [FOIA]
Internal Reporting	Indicator equal to 1 if the employee first reported the allegation internally before filing an FCA lawsuit, 0 otherwise. [FOIA + PACER]
Internal Investigation	Indicator equal to 1 if the firm conducted an internal investigation in response to an employee's internal reporting, 0 otherwise. [FOIA + PACER]
No Retaliation	Indicator equal to 1 if the firm did not retaliate against an employee in response to an employee's internal reporting, 0 otherwise. [FOIA + PACER]
Independent Variables	
Whistleblower Characteristics	
Rank and File	Indicator equal to 1 if the employee whistleblower is a rank-and-file employee as described in the FCA lawsuit, 0 otherwise. [FOIA + PACER]
Middle Management	Indicator equal to 1 if the employee whistleblower is part of the middle management as described in the FCA lawsuit, 0 otherwise. [FOIA + PACER]
Top Management	Indicator equal to 1 if the employee whistleblower is part of the top management as described in the FCA lawsuit, 0 otherwise. Note that this group is the baseline group in the regression analyses. [FOIA + PACER]
Male	Indicator equal to 1 if the employee whistleblower is male as described in the FCA lawsuit, 0 otherwise. [FOIA + PACER]
Governance Characteristics	
Weak Internal Controls	Indicator equal to 1 if the fitted value of internal control weakness, estimated using the full sample of Compustat firms, falls in the highest decile in the year of the filing of the FCA lawsuit, 0 otherwise. The fitted values are obtained from the following model, as estimated by Doyle et al. (2007): $Internal\ Control\ Weakness = \beta_0 + \beta_1 Size + \beta_2 \log Firm\ Age + \beta_3 Losses + \beta_4 Segments + \beta_5 Foreign\ Trans + \beta_6 Extreme\ SG + \beta_7 Restructure + error,$ <i>Size</i> is as defined below, <i>Firm Age</i> is the logarithm of a firm's age in the year of the whistleblowing event based on the first time appearance in Compustat, <i>Losses</i> is an indicator variable equal to 1 if earnings before extraordinary items in the two most recent years sum to less than zero, and 0 otherwise, <i>Segments</i> is the log of the number of operating and geographic segments reported by Compustat Segments database, <i>Foreign Trans</i> is an indicator variable equal to 1 if the firm has nonzero foreign translation, and 0 otherwise, <i>Extreme SG</i> is an indicator variable equal to 1 if year-over-year industry-adjusted sales growth falls into the top quintile, and 0 otherwise, and <i>Restructure</i> is the aggregate restructuring charge in the two most recent years, scaled by firm's market capitalization. [C + CS]
Strong Employee Relations	Indicator equal to 1 if the count of employee strengths is greater than the count of employee concerns as reported in the KLD database in the year of the filing of the FCA lawsuit, 0 otherwise. [KLD]

%Independent Directors	Independent directors as a proportion of total directors on the board in the year of the filing of the FCA lawsuit. [ISS]
Strong Governance	Indicator equal to 1 if the weak internal controls rank is smaller than the median, if <i>Strong Employee Relations</i> equals 1, or if <i>%Independent Directors</i> is larger than the median, and 0 otherwise. [C + CS + ISS + KLD]
Missing Indicators	Separate indicators equal to 1 if <i>Employee Relations</i> or <i>%Independent Directors</i> are missing, and 0 otherwise.
Control Variables	
Leverage	Long-term debt (DLTT) scaled by total assets (AT) in the year of the FCA lawsuit filing. [C]
ROA	Return on assets, defined as the net income (NI) divided by total assets (AT) of the current year, in the year of the FCA lawsuit filing. [C]
M&A	An indicator set equal to 1 if the firm was involved in a merger or acquisition, 0 otherwise. [C]
Size	Logarithm of total assets (AT) in the year of the FCA lawsuit filing. [C]

Appendix B. Examples of whistleblower allegations

The following examples of whistleblower fraud allegations are based on excerpts from court documents.

Example 1: *US ex rel. Thom, Robert v Pacifica Service Inc.*

Relator [Mr. Thom] verbally informed his immediate supervisor and General Manager for PACIFICA that employees have improperly used, damaged and/or disposed of government property for their own personal benefit and/or pecuniary gain. [...] He was told on numerous occasions that an investigation would be conducted. However, no investigation was ever conducted. [...] On or about June 28, 1996, Relator submitted a letter of resignation from his employment with the Defendant. [...] the defendants, harassed, discriminated and otherwise retaliated against this Relator, resulted in Relator assigned diminished inferior duties, for which Relator has no training [...] resulting in Relator sustaining serious physical injury.

Case Facts:

- Case Received by Court: 3/10/1997
- DOJ Election Decision: 10/1/1997
- DOJ Intervened? No
- WB Reporting channels: Direct Supervisor
- Firm Response: Ignored
- Firm Retaliation: Whistleblower was harassed and forced to quit.

Example 2: *US ex rel. Hicks, James A v PeopleSoft Inc.*

PeopleSoft submitted a proposed GSA price list and Commercial Pricing Practices as part of MAS solicitations, but neither of document disclose all discounts to the government. Hicks (the relator) has calculated that PeopleSoft's failure to disclose resulted in a minimum of \$7,152,112 in excess fees charged to the federal government in 1997. [...] Hicks warned PeopleSoft's National Sales Manager that not including discounts was a risk to the company, but the manager told Hicks not to do anything about the issue. In January 2000, after meeting with in-house attorney, Hicks was discharged.

Case Facts:

- Case Received by Court: 3/5/2003
- DOJ Election Decision: 4/7/2006
- DOJ Intervened? Yes
- Settlement Judgement: 10/27/2006
- Time from Filing to Settlement: 3.65 years
- Settlement Amount: \$98.5 Million
- Reporting Channel: Direct supervisor
- Firm Response: Ignored
- Firm Retaliation: Whistleblower was fired

Example 3: *US ex rel. Bill, Betty; State of IL v Curran Contracting Co Inc.; Curran Group Inc.*

Defendants regularly and systematically inflated the amounts of materials that were billed to the Government under road building contracts. In addition, defendants, knowingly made false representation of the amount of business being done by Disadvantaged Business Enterprises. [...] In July of 1999, Bill contacted IDOT to report that Curran (the defendant) was defrauding the Government. At sometime thereafter, Curran and its employees subsequently retaliated against her through harassment, threats and other discriminatory acts. [...] Bill suffered emotional distress and was constructively discharged from Curran's employment.

Case Facts:

- Case Received by Court: 5/17/2001
- DOJ Election Decision: 5/16/2005
- DOJ Intervened? Yes
- Settlement Judgement: 6/9/2005

- Time from Filing to Settlement: 4.07 years
- Settlement Amount: \$0.5 Million
- Reporting channel: Report to State government directly
- Firm Retaliation: Whistleblower was harassed and fired

Example 4: *US; State of Florida ex rel. Rubin, Darren A v University of South Florida et al.*

After discovering the falsified research data, Dr Moor and Relator RUBIN present the findings to Mark P. McLean, Ph.D. (defendant). [...] Mark convinced that it would be the best never to disclose said research findings to anyone outside of the immediate group, [...] Relator Rubin, having continuing concerns on actions taken with respect to falsified research notebook, addressed to President of University of South Florida, [...] he was informed that Dr. Phillip Marty, had been assigned responsibility for conducting the initial inquiry concerning the reported research misconduct.

Case Facts:

- Case Received by Court: 6/6/2008
- DOJ Election Decision: 4/2/2012
- DOJ Intervened? No
- Reporting Channels: Direct supervisor; Top management
- Firm Response: Internal investigation
- Firm Retaliation: Whistleblower was fired

Example 5: *US ex rel. Harris, Robert v JP Morgan-Chase & Co.*

[JP Morgan Chase & Co.'s] inability to keep up with their loss mitigation duties led to purposeful shortcuts, including but not limited to forging documents, forging signatures, backdating documents, expanding loss recognition authority, and lack of proper document review. Defendants eventually abandoned all pretense of loss mitigation for tens of thousands of loans it considered too costly and time consuming to properly handle. [...] As a direct and proximate result of Defendants' fraudulent and/or illegal actions and pattern of fraudulent conduct, the United States has paid directly or indirectly thousands of false claims and spent millions of dollars. [...] Plaintiff-Relator [Harris] notified Chase management officials about the Defendants' failure to comply with regulations and loss mitigation requirements and that Chase was foreclosing on loans without proper loss mitigation. [...] Defendants fired Mr. Harris in retaliation for complaining about these issues on or about January 11, 2010.

Case Facts:

- Case Received by Court: 12/29/2006
- DOJ Election Decision: 4/17/2012
- DOJ Intervened? Yes
- Settlement Judgment: 4/4/2012
- Time from Filing to Settlement: 5.27 years
- Settlement Amount: \$6.18 Million
- Reporting Channel: Top management
- Firm Response: Ignored
- Firm Retaliation: Whistleblower was fired

Figure 1

Timeline of the False Claims Act Qui Tam Enforcement Process

This figure shows the timeline of the False Claims Act *qui tam* enforcement process. The process starts with a whistleblower filing an allegation with a court. Then the Department of Justice in conjunction with the allegedly defrauded federal agency investigate the claim. On average, this investigation takes more than two years. At the end of the investigation, the DOJ and federal agency decide whether to intervene in or decline to join the case. If the DOJ declines to join the case the whistleblower can pursue the case without the DOJ. Cases end with terminations or settlements.

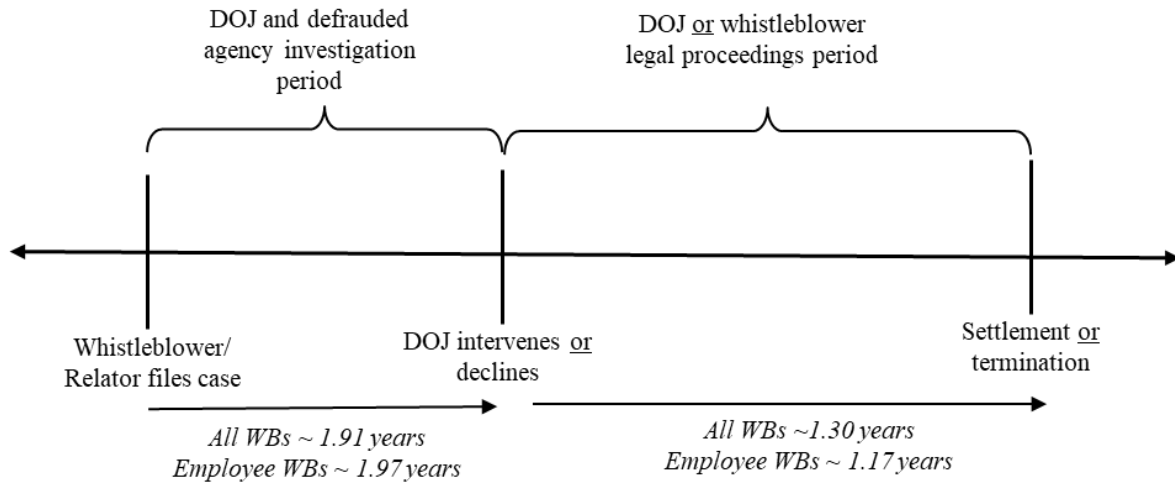


Figure 2
Employee Whistleblower Lawsuits under the False Claims Act

This figure shows the sequence of actions that can be taken by an employee whistleblower once he or she observes potential fraud against the government. The employee can either directly report the issue externally, or first report the issue internally. Some of the internal reports are resolved, and others are not pursued externally. Only a subset of those reported internally are subsequently reported externally by the whistleblower. This figure also describes the subset of all employee whistleblowing cases that we get to observe and that can be included in our sample.

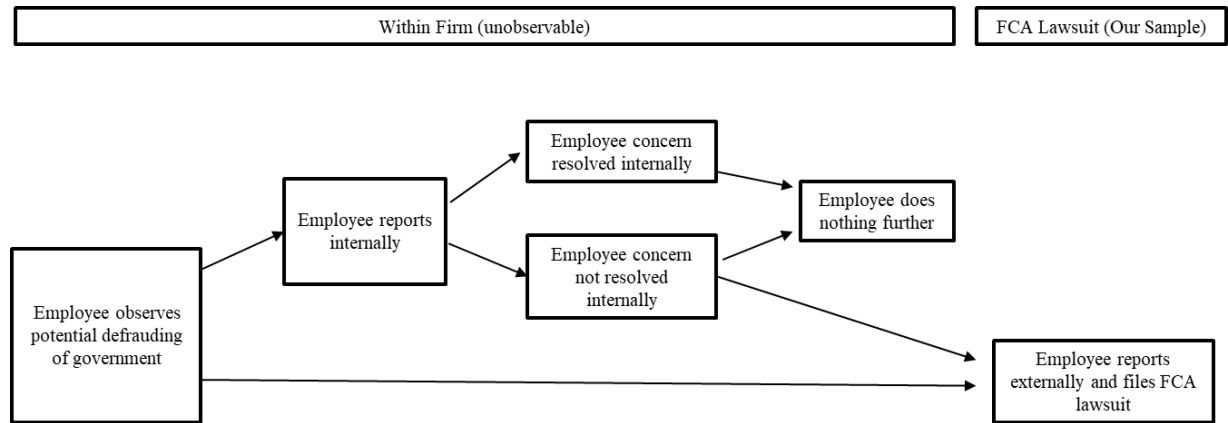


Table 1: Sample**Panel A: Sample composition**

This table presents the sample composition for the period 1994-2012.

	Unique Lawsuits	Unique Firms	Unique Whistleblowers	Unique WB-Lawsuit Observations
Full Sample of Lawsuits	5,611		6,719	7,450
Less: Lawsuits without Court Document	(3,685)		(4,401)	(5,000)
Sample used for Table 1, Panel B	1,926	2,219	2,318	2,450
Less: Non-Employee Whistleblowers	(591)	(679)	(683)	(784)
Sample used for Table 1, Panels C-D; Table 2; Table 4; Table 7	1,335	1,540	1,635	1,666
Less: Private Firms	(1,022)	(1,320)	(1,246)	(1,275)
Sample used for Table 1, Panel E; Table 2; Table 4; Table 7	313	220	389	391
Less: Missing Compustat Data	(12)	(8)	(17)	(17)
Sample used for Table 3; Tables 5-6; Tables 8-9	301	212	372	374

Panel B. Sample composition by type of whistleblower

This table presents the sample composition for the period 1994-2012 by the type of whistleblower for a subset of 2,450 whistleblower-lawsuit observations, involving 1,926 unique lawsuits with available court documents in the Public Access to Court Electronic Records (PACER) system filed by 2,318 unique whistleblowers.

Description	WB-Lawsuit Observations	% of Total	% Settled	Average Settlement (\$ Millions)	Total Settlements (\$ Millions)
(Former) Employee	1,666	68.0%	27.3%	\$15.6	\$7,083.4
Unknown	493	20.1%	21.1%	\$32.8	\$3,415.5
Customer	110	4.5%	14.5%	\$9.0	\$143.4
Contractor	54	2.2%	13.0%	\$8.0	\$55.9
Business Partner	25	1.0%	20.0%	\$16.2	\$81.1
External Auditor	24	1.0%	16.7%	\$51.8	\$207.1
Tenant	20	0.8%	25.0%	\$0.1	\$0.3
Government Employee	13	0.5%	7.7%	\$62.8	\$62.8
Supplier	12	0.5%	16.7%	\$139.2	\$278.4
Consultant	11	0.4%	27.3%	\$54.5	\$163.6
Competing Firm	9	0.4%	33.3%	\$10.4	\$31.1
Lawyer/Law Firm	7	0.3%	0.0%	-	\$0.0
Private Investigator	4	0.2%	0.0%	-	\$0.0
Stockholder	2	0.1%	0.0%	-	\$0.0
Total	2,450	100.0%	24.7%	\$19.0	\$11,522.60

Panel C: Sample composition by year

This table presents the distribution of employee whistleblower lawsuits against firms in our sample for the period 1994-2012 by year.

Year	Lawsuits Full Sample	% of Total	Lawsuits Public Firms	% of Total
1994	2	0.1%	1	0.3%
1995	7	0.5%	1	0.3%
1996	16	1.2%	8	2.6%
1997	31	2.3%	5	1.6%
1998	32	2.4%	9	2.9%
1999	40	3.0%	8	2.6%
2000	57	4.3%	10	3.2%
2001	46	3.4%	8	2.6%
2002	62	4.6%	14	4.5%
2003	42	3.1%	19	6.1%
2004	99	7.4%	17	5.4%
2005	149	11.2%	37	11.8%
2006	142	10.6%	31	9.9%
2007	144	10.8%	36	11.5%
2008	161	12.1%	28	8.9%
2009	130	9.7%	37	11.8%
2010	32	2.4%	14	4.5%
2011	100	7.5%	23	7.3%
2012	42	3.1%	7	2.2%
Total	1,335	100.0%	313	100.0%

Panel D: Sample composition by agency

This table presents the sample composition for the period 1994-2012 by allegedly defrauded agency.

Agency Name	Lawsuits Full Sample	% of Total	Lawsuits Public Firms	% of Total
Department of Health and Human Services	865	64.8%	185	59.1%
Department of Defense	180	13.5%	69	22.0%
Department of Education	55	4.1%	6	1.9%
Department of Housing and Urban Development	33	2.5%	6	1.9%
General Services Administration	30	2.2%	5	1.6%
Department of Transportation	24	1.8%	3	1.0%
Department of Energy	15	1.1%	4	1.3%
Department of Justice	14	1.0%	2	0.6%
Department of Homeland Security	12	0.9%	2	0.6%
Department of the Interior	11	0.8%	3	1.0%
Department of Agriculture	11	0.8%	1	0.3%
Department of Labor	10	0.7%	2	0.6%
Environmental Protection Agency	10	0.7%	-	-
Department of State	5	0.4%	3	1.0%
U.S. Postal Service	5	0.4%	2	0.6%
NASA	5	0.4%	2	0.6%
Small Business Administration	5	0.4%	-	-
Federal Communications Commission	5	0.4%	-	-
Department of the Treasury	4	0.3%	3	1.0%
Department of Veterans' Affairs	4	0.3%	-	-
Agency for International Development	2	0.1%	2	0.6%
Office of Personnel Management	2	0.1%	2	0.6%
Department of Commerce	2	0.1%	1	0.3%
Social Security Administration	2	0.1%	1	0.3%
Equal Employment Opportunity Commission	2	0.1%	1	0.3%
CIA	2	0.1%	-	-
Federal Deposit Insurance Corporation	1	0.1%	1	0.3%
Tennessee Valley Authority	1	0.1%	1	0.3%
Federal Reserve System	1	0.1%	1	0.3%
Office of the President	1	0.1%	-	-
Nuclear Regulatory Commission	1	0.1%	-	-
National Foundation on the Arts and Humanities	1	0.1%	-	-
Export-Import Bank of the US	1	0.1%	-	-
Unknown	13	1.0%	5	1.6%
Total	1,335	100.0%	313	100.0%

Table 2: Public firms sample

Panel A: Industry distribution of lawsuits against public firms

This table presents the distribution of whistleblower lawsuits among the public firms in our sample for the period 1994-2012 by Fama-French's 12 industry classification.

Industry	Firms	% of Total	Industry Name
1	5	2.3%	Consumer Non-Durables
2	3	1.4%	Consumer Durables
3	17	7.7%	Manufacturing
4	6	2.7%	Energy – Oil, Gas, and Coal Extraction and Products
5	2	0.9%	Business Equipment
6	25	11.4%	Chemicals and Allied Products
7	2	0.9%	Telecommunications
8	0	0.0%	Utilities
9	20	9.1%	Shops Wholesale, Retail, and Some Services
10	49	22.3%	Healthcare, Medical Equipment, and Drugs
11	28	12.7%	Money and Finance
12	63	28.6%	Other Industries (e.g., Mines, Construction, Transportation)
Total	220	100.0%	

Panel B: Descriptive statistics of public firms

This table provides descriptive statistics on the firm characteristics for the public firm-years present in our sample for 1994-2012.

Variable	Public Firms Sample						
	Mean	St. Dev.	Min	p25	Med	p75	Max
Total Assets (\$ million)	54,560	181,038	21	397	4,436	25,260	647,483
ROA (%)	-0.08	1.23	-2.39	0.01	0.05	0.08	0.24
Leverage (%)	0.22	0.20	0.00	0.06	0.19	0.30	0.95
M&A Activity (%)	0.28	0.45	0	0	0	1	1

Table 3: Characteristics of cases and employee whistleblowers

This table presents characteristics of the employee whistleblowers for the full sample of 1,666 whistleblower-lawsuit observations as well as for the public-firms sample of 391 whistleblower-lawsuit observations for the period 1994-2012.

Description	Full Sample (N=1,666)					Public Firms Sample (n=391)				
	Obs.	% of Total	% Settled	Average Settlement (\$ Millions)	Total Settlements (\$ Millions)	Obs.	% of Total	% Settled	Average Settlement (\$ Millions)	Total Settlements (\$ Millions)
<i>Case Outcomes</i>	1,666	100%	27.3%	\$15.6	7,083.4	391	100%	28.9%	\$29.4	3,327.3
<i>Gender</i>										
Female	682	40.9%	27.1%	\$14.7	\$2,716.6	133	34.0%	21.1%	\$40.0	\$1,119.5
Male	984	59.1%	27.4%	\$16.2	\$4,366.8	258	66.0%	32.9%	\$26.0	\$2,207.8
<i>Rank</i>										
Rank and File	979	58.8%	24.9%	\$16.9	\$4,112.9	231	59.1%	24.2%	\$46.4	\$2,598.4
Middle Management	453	27.2%	27.6%	\$17.4	\$2,170.7	95	24.3%	31.6%	\$22.0	\$659.7
Upper Management	69	4.1%	33.3%	\$23.0	\$529.9	18	4.6%	16.7%	\$19.2	\$57.6
No Information	165	9.9%	38.2%	\$4.3	\$270.0	47	12.0%	51.1%	\$0.5	\$11.7
<i>Repeat Whistleblowers</i>										
1 Allegation Only	1,620	97.2%	27.2%	\$13.4	\$5,896.5	380	97.2%	28.2%	\$23.9	\$2,555.6
Multiple Allegations	46	2.8%	30.4%	\$84.8	\$1,186.9	11	2.8%	54.5%	\$128.6	\$771.7

Table 4: Whistleblower reporting protocol

Panel A: Internal versus external reporting by employee whistleblowers

This table presents statistics of whether employee whistleblowers reported misconduct internally first before taking the information to the authorities and the reasons the whistleblowers claimed they were unable to raise the issue internally for the cases when they directly went to external authorities (in several cases the whistleblowers did not provide a reason in the court documents for not raising the issue internally – we code those as “No Reason Provided”). The row “Difference” reports the difference between lawsuits reported internally first and those that are not and tests whether these differences are significant at the two-tailed 10% (*), 5% (**), or 1% (***) levels.

Description	Full Sample						Public Firms Sample					
	Obs.	Obs.	% of Total	% Settled	Average Settlement (\$ Millions)	Total Settlements (\$ Millions)	Obs.	Obs.	% of Total	% Settled	Average Settlement (\$ Millions)	Total Settlements (\$ Millions)
<i>Reported Internally First</i>	1,666						391					
No		769	46.2%	30.6%	\$15.9	\$3,743.2		192	49.1%	32.8%	\$30.9	\$1,944.2
Yes		897	53.8%	24.5%	\$15.2	\$3,340.2		199	50.9%	25.1%	\$27.7	\$1,383.1
<i>Difference</i>			-7.6%***	5.5%***	\$0.7				-1.8%	7.7%*	\$3.2	
<i>Reasons for not Reporting Internally First</i>	769						192					
No Reason Provided		690	89.7%	29.1%	\$16.6	\$3,345.2		168	87.5%	26.8%	\$43.0	\$1,933.7
Fear of Retaliation		72	9.4%	44.4%	\$12.4	\$396.5		23	12.0%	78.3%	\$0.6	\$10.5
Supervisors Involved		4	0.5%	50.0%	\$0.7	\$1.5		-	-	-	-	-
External Parties Already Knew		3	0.4%	0.0%	-	\$0.0		1	0.5%	0.0%	-	\$0.0

Panel B: Internal reporting, whistleblower rank, and case outcome

This table reports the estimation results from regressions of internal reporting and whistleblower rank on case outcomes. Columns 1 and 2 report results from a linear probability regression on the probability of cases resulting in a settlement. The dependent variable, *Settled Lawsuit*, is an indicator equal to 1 in the year of the whistleblower lawsuit if the case resulted in a settlement, and 0 otherwise. Columns 3 and 4 report results from an OLS regression on settlement amount. The dependent variable, *Settlement Amount*, is the natural logarithm of one plus the settlement amount in the year of the whistleblower lawsuit. In Columns 1 and 3, the sample consists of employee whistleblowers working for publicly listed firms with available information on the control variables, and spans the period 1994-2012. In Columns 2 and 4, the sample consists of employee whistleblowers working for publicly listed firms with available information on their rank and control variables, and spans the period 1994-2012. All variables are defined in Appendix A. We include year and defrauded agency fixed effects. Standard errors are clustered at the defrauded-agency level. *, **, *** indicate significance at the two-tailed 10%, 5%, and 1% levels, respectively.

Dependent Variable	Settled Lawsuit	Settled Lawsuit	Settlement Amount	Settlement Amount
Variables	(1)	(2)	(3)	(4)
Reporting				
Internal Reporting	-0.025 (0.106)		-0.140 (0.208)	
Whistleblower Characteristics				
Rank and File		0.256*** (0.082)		0.489*** (0.065)
Middle Management		0.257*** (0.071)		0.483*** (0.111)
Male		0.078* (0.043)		0.159* (0.085)
Control Variables				
Leverage	-0.082 (0.117)	-0.044 (0.124)	0.025 (0.321)	0.143 (0.400)
ROA	0.072 (0.071)	0.114 (0.131)	0.167 (0.160)	0.211 (0.261)
M&A	0.015 (0.042)	0.028 (0.048)	-0.251 (0.168)	-0.241 (0.198)
Size	-0.024** (0.011)	-0.035*** (0.012)	-0.011 (0.008)	-0.026*** (0.009)
Agency FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R-square	0.368	0.313	0.198	0.219
Observations	374	331	374	331

Table 5: Whistleblower and governance characteristics and internal reporting**Panel A: Whistleblower and governance characteristics and internal reporting**

This table reports results from a linear probability regression on the probability of internal reporting based on whistleblower and governance characteristics. The dependent variable, *Internal Reporting*, is an indicator equal to 1 in the year of the whistleblower lawsuit if the employee first reported the case internally, and 0 otherwise. The sample consists of employee whistleblowers working for publicly listed firms with available information on *Internal Reporting*, and spans the period 1994-2012. All variables are defined in Appendix A. We include year and defrauded agency fixed effects. Standard errors are clustered at the defrauded-agency level. *, **, *** indicate significance at the two-tailed 10%, 5%, and 1% levels, respectively.

Dependent Variable	Internal Reporting		
Variables	(1)	(2)	(3)
Governance Characteristics			
Weak Internal Controls	-0.070** (0.025)	-0.091*** (0.030)	
Strong Employee Relations	0.106* (0.056)	0.107* (0.058)	
% Independent Directors	0.513* (0.268)	0.504* (0.279)	
Strong Governance			-0.141 (0.089)
Whistleblower Characteristics			
Rank and File		-0.252* (0.135)	-0.419*** (0.140)
Middle Management		-0.218 (0.151)	-0.174 (0.128)
Male		0.003 (0.056)	-0.001 (0.046)
Interaction Term			
Rank and File x Strong Governance			0.245*** (0.076)
Control Variables			
Leverage	0.126 (0.142)	0.075 (0.117)	0.055 (0.136)
ROA	0.247*** (0.013)	0.249*** (0.015)	0.231*** (0.021)
M&A	-0.015 (0.055)	-0.001 (0.054)	0.037 (0.032)
Size	-0.043** (0.016)	-0.040** (0.019)	-0.027** (0.012)
Agency FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Missing Indicators	Yes	Yes	Yes
Adj. R-square	0.240	0.249	0.242
Observations	331	331	331

Panel B: Internal and external reporting channels

This table describes the internal and external reporting channels used by whistleblowers separately for the full and public firms sample. Note that whistleblowers may use multiple channels internally and externally, increasing the sample size for this table.

Description	Full Sample						Public Firms Sample					
	Obs.	No. of Times Used	% of Total	% Settled	Average Settlement (\$ Millions)	Total Settlements (\$ Millions)	Obs.	No. of Times Used	% of Total	% Settled	Average Settlement (\$ Millions)	Total Settlements (\$ Millions)
<i>Internal Reporting Channels</i>	1,281						302					
Top Management		481	37.5%	24.3%	\$12.3	\$1,438.5		104	34.4%	22.1%	\$18.1	\$416.9
Direct Supervisor		441	34.4%	21.8%	\$21.5	\$2,061.4		117	38.7%	22.2%	\$22.9	\$595.4
Colleague		130	10.1%	24.6%	\$11.0	\$353.4		23	7.6%	34.8%	\$29.9	\$239.6
Legal Compliance		124	9.6%	28.2%	\$20.3	\$709.8		27	8.9%	37.0%	\$18.3	\$183.1
HR		50	3.9%	20.0%	\$1.5	\$15.2		15	4.9%	6.7%	\$3.0	\$3.0
Hotline		31	2.4%	19.4%	\$4.4	\$26.3		11	3.6%	18.2%	\$10.3	\$20.5
Internal Auditor		24	1.9%	12.5%	\$11.5	\$34.4		5	1.6%	0.0%	-	\$0.0
<i>External Reporting Channels</i>												
Reported Internally First	897						199					
Straight to Court System		856	95.4%	25.0%	\$15.6	\$3,333.0		193	97.0%	25.4%	\$28.2	\$1,383.0
Government Agency		34	3.8%	17.6%	\$1.2	\$7.2		6	3.0%	16.7%	\$0.1	\$0.1
External Auditor		7	0.8%	0.0%	-	\$0.0		0	0.0%	-	-	\$0.0
Directly Reported Externally	769						192					
Straight to Court System		740	96.2%	30.8%	\$16.4	\$3,732.5		184	95.8%	34.2%	\$30.9	\$1,944.2
Government Agency		29	3.8%	24.1%	\$1.5	\$10.8		8	4.2%	0.0%	-	\$0.0
External Auditor		0	0.0%	-	-	\$0.0		0	0.0%	-	-	\$0.0

Table 6: Firm behavior towards employee whistleblowers

Panel A: Types of firm responses and retaliations against employee whistleblowers

This table presents the types of responses to complaints and retaliations against employee whistleblowers from the alleged firms for the full sample of private and public firms, as well as for the public firms sample from 1994-2012.

Description	Full Sample					Public Firms Sample				
	Obs.	% of Total	% Settled	Average Settlements (\$Millions)	Total Settlements (\$ Millions)	Obs.	% of Total	% Settled	Average Settlements (\$Millions)	Total Settlements (\$ Millions)
<i>Response to Allegation</i>	897					199				
Ignored	546	60.9%	14.3%	\$6.9	\$1,520.8	117	58.8%	14.6%	\$17.2	\$860.3
Cover Up	92	10.3%	3.2%	\$3.7	\$824.2	26	13.1%	2.0%	\$0.0	\$1.4
Internal Investigation	56	6.2%	1.0%	\$0.3	\$59.8	16	8.0%	1.0%	\$1.0	\$50.0
No Information	203	22.6%	6.0%	\$4.3	\$935.4	40	20.1%	7.5%	\$9.4	\$471.5
<i>Retaliation Against WB</i>	1,355					296				
Fired	505	37.1%	12.0%	\$8.3	\$1,819.0	106	35.8%	12.1%	\$16.8	\$839.7
Harassed	219	16.1%	5.2%	\$1.9	\$411.0	52	17.6%	5.5%	\$6.7	\$334.0
Threat	135	9.9%	1.6%	\$0.2	\$33.7	29	9.8%	2.0%	\$0.2	\$9.2
Quit	99	7.3%	3.6%	\$0.8	\$170.3	16	5.4%	2.5%	\$1.9	\$93.8
Demotion	82	6.0%	1.4%	\$0.6	\$121.3	18	6.1%	0.0%	\$0.0	\$0.0
Suspension	34	2.5%	0.7%	\$0.1	\$16.6	5	1.7%	0.0%	\$0.0	\$0.0
Lawsuit	6	0.4%	0.2%	\$0.0	\$0.9	2	0.7%	0.0%	\$0.0	\$0.0
No Retaliation	275	20.6%	9.8%	\$6.7	\$1,478.5	68	23.0%	10.1%	\$10.8	\$540.5

Panel B: Whistleblower and governance characteristics and internal investigation

This table reports results from a linear probability regression on the probability of an internal investigation based on whistleblower and governance characteristics. The dependent variable, *Internal Investigation*, is an indicator equal to 1 in the year of the whistleblower lawsuit if the firm started an internal investigation in response to an employee's internal reporting, and 0 otherwise. The sample consists of employee whistleblowers working for publicly listed firms who reported the issue internally first, and spans the period 1994-2012. All variables are defined in Appendix A. We include year and defrauded agency fixed effects. Standard errors are clustered at the defrauded-agency level. *, **, *** indicate significance at the two-tailed 10%, 5%, and 1% levels, respectively.

Dependent Variable Variables	Internal Investigation		
	(1)	(2)	(3)
Governance Characteristics			
Weak Internal Controls	-0.003 (0.040)	0.030 (0.055)	
Strong Employee Relations	0.193** (0.083)	0.208** (0.075)	
% Independent Directors	0.175 (0.834)	0.265 (0.798)	
Strong Governance			-0.135 (0.085)
Whistleblower Characteristics			
Rank and File		0.149*** (0.034)	0.047 (0.095)
Middle Management		0.178** (0.073)	0.199** (0.086)
Male		-0.102*** (0.021)	-0.100*** (0.016)
Interaction Term			
Rank and File x Strong Governance			0.166** (0.074)
Control Variables			
Leverage	0.317*** (0.038)	0.383*** (0.073)	0.339*** (0.056)
ROA	-0.057 (0.056)	-0.048 (0.047)	-0.051 (0.041)
M&A	-0.085 (0.128)	-0.106 (0.121)	-0.034 (0.081)
Size	-0.008 (0.008)	-0.014* (0.008)	-0.013 (0.019)
Agency FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Missing Indicators	Yes	Yes	Yes
Adj. R-square	0.321	0.349	0.312
Observations	144	144	144

Panel C: Whistleblower and governance characteristics and no retaliation

This table reports results from a linear probability regression on the probability of firing an employee whistleblower based on whistleblower and governance characteristics. The dependent variable, *No Retaliation*, is an indicator equal to 1 in the year of the whistleblower lawsuit if the firm did not retaliate against an employee in response to an employee's internal reporting, and 0 otherwise. The sample consists of employee whistleblowers working for publicly listed firms who reported the issue internally first, and spans the period 1994-2012. All variables are defined in Appendix A. We include year and defrauded agency fixed effects. Standard errors are clustered at the defrauded-agency level. *, **, *** indicate significance at the two-tailed 10%, 5%, and 1% levels, respectively.

Dependent Variable	No Retaliation		
Variables	(1)	(2)	(3)
Governance Characteristics			
Weak Internal Controls	0.146 (0.110)	0.164 (0.108)	
Strong Employee Relations	-0.095 (0.179)	-0.093 (0.182)	
% Independent Directors	0.180** (0.085)	0.193** (0.090)	
Strong Governance			-0.006 (0.051)
Whistleblower Characteristics			
Rank and File		0.092*** (0.030)	-0.152* (0.073)
Middle Management		0.072 (0.049)	0.058 (0.045)
Male		0.040 (0.033)	0.030 (0.030)
Interaction Term			
Rank and File x Strong Governance			0.269*** (0.074)
Control Variables			
Leverage	-0.171 (0.239)	-0.139 (0.239)	-0.124 (0.227)
ROA	-0.106** (0.045)	-0.121** (0.043)	-0.084 (0.082)
M&A	-0.123 (0.095)	-0.138 (0.081)	-0.161* (0.081)
Size	-0.050*** (0.010)	-0.054*** (0.008)	-0.069*** (0.007)
Agency FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Missing Indicators	Yes	Yes	Yes
Adj. R-square	0.304	0.307	0.313
Observations	179	179	179

Table 7: Consequences for employee whistleblowers

This table reports the long-term career consequences for employee whistleblowers. The table is constructed from profiles collected from a widely used professional networking site. Next job refers to the whistleblower's immediate job after working for the accused company. Latest job refers to the whistleblower's last reported job.

	All Profiles			Rank and File			Middle Management			Upper Management		
	Obs.	Next job	Latest Job	Obs.	Next job	Latest Job	Obs.	Next job	Latest Job	Obs.	Next job	Latest Job
Number of years from the job at the accused firm	80	1.1	8.0	47	1.4	7.9	23	0.9	7.6	5	0.0	7.8
No Information	9	-	-	4	-	-	3	-	-	1	-	-
<i>Position:</i>	89			51			26			6		
Better		31%	43%		35%	51%		38%	42%		0%	17%
Equal		21%	15%		27%	18%		19%	15%		0%	0%
Worse		10%	12%		10%	10%		8%	12%		33%	50%
Self-employed		21%	16%		20%	16%		23%	19%		50%	17%
No Information		16%	15%		8%	6%		12%	12%		17%	17%
<i>Moved to another state:</i>	89			51			26			6		
Yes		16%	24%		16%	25%		4%	12%		33%	33%
No		30%	24%		31%	24%		31%	23%		17%	17%
No Information		54%	52%		53%	49%		65%	65%		50%	50%
<i>Changed Industry:</i>	89			51			26			6		
Yes		35%	42%		33%	45%		38%	42%		50%	33%
No		52%	44%		55%	45%		46%	46%		33%	17%
No Information		13%	13%		12%	8%		15%	12%		17%	50%