Which Corporate Victims Get Justice?

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This Draft May 24, 2022
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Abstract

Corporate law and governance scholarship focuses almost exclusively on agency conflicts between shareholders and managers. Conflicts between managers and other stakeholders—employees, customers, the government, and the public at large—are largely assumed to be addressed by other areas of the law, whereas shareholders are seen as requiring special protections. This paper challenges these assumptions. Using a novel dataset on harms caused by corporations, we show that even among the most newsworthy harms, the US legal system offers redress at significantly higher rate when shareholders are victims as compared to other stakeholder victims. Outcomes are more severe when shareholders are victims, with individual managers being targeted by legal action and sent to prison at a higher rate in those cases relative to when other stakeholders are harmed. Cases where the government itself is the victim also trigger more criminal prosecutions. Our results call into question key assumptions underlying the notion that maximizing shareholder value maximizes social welfare and shed light also on calls for corporations to voluntarily take into account the preferences of non-shareholder stakeholders.

> "What if Apple sold phones that it knew would explode after one year, and they all exploded and killed millions of people? And the Justice Department looked into it, examined the facts and the law, and said: "You know, this looks like securities fraud. The real victims here are Apple's shareholders, who had no warning that the phones would explode and kill their users, and who have lost money when the stock dropped." If you were an alien trying to understand the U.S. legal system, you might conclude that its purpose is to protect shareholders from losing money when the companies they own harm consumers."

> Matt Levine, *Bloomberg Opinion,* January 31, 2018

1. Introduction

Corporate governance scholarship focuses almost exclusively on issues in the domains of corporate and securities laws meant to address fiduciary duties within corporations and potential conflicts among shareholders and between shareholders and managers. The legal rights and protections of shareholder are viewed as important for ensuring that corporations can raise funds and engage in productive activities. Although corporations must act lawfully, they and their executives and directors may have incentives to cause harm or break laws if they can benefit from doing so and maintain sufficient deniability. An implicit assumption in the governance literature and in corporate law is that contracts, markets and laws provide adequate protections to the non-shareholder stakeholders, but there are reasons to question this assumption.

This paper aims to shed light on the legal outcomes that follow when corporations cause harm. Specifically, we explore the following basic questions using data from US: Are the contours of the legal outcomes that follow corporate harms, including whether and what legal action is taken, whether individuals are targeted and whether any individuals faced civil or criminal charges and prison time different across stakeholders and harm types? For example, is criminal action more likely when shareholders suffer financial loss than when customers or employees are harmed? Is the answer different if stakeholders suffer physical injury or death? What if the government is the victim? Of course, outcome in each case depends on the language and mechanisms of the law, which are endogenous and include what steps are available to participants and reflect their preferences, incentives, and resources. Participants in each case include victims, private lawyers, prosecutors, and people within regulatory agencies and law enforcement bodies. Ultimately, the outcomes are shaped by political and economic forces affecting the language, interpretation, and enforcement of laws, including personnel, authority, budgets, etc. Laws may differ, in particular, regarding what conduct they criminalize, treating more harshly the deception of investors or the government than deceptions of customers or employees.

Our main findings are that the US legal system offers redress at a much higher rate when shareholders suffer harm by corporations than it does when other stakeholders are victims. In our data, even among newsworthy harms, we observe legal consequences of any kind to corporate harm only 55% of the time as the base level. Legal actions are much more common, however, when the harmed stakeholder is a shareholder, in which case legal consequences materialize 90% of the time. This general trend holds when looking specifically at civil actions, criminal actions, and private litigation by shareholders, and the main exception is when corporate harms that fall on the government as an institution. We find that the government is much more likely to pursue criminal litigation when it is harmed (e.g., by fraud) even when conditioning on the specific law that the corporation broke.

On the intensive margin of enforcement, we find that conditional on a civil case occurring, enforcement is more severe both in the sense that criminal prosecutions are more likely and in the sense that individuals are more likely to be targeted when the government or shareholders are

harmed relative to other stakeholder victims. The main reason appears to be that the system makes targeting individuals easier when shareholders are harmed. Overall, and consistent with other studies such as Garrett (2016, 2020), it is exceedingly rare for individuals who act on behalf of a corporation to go to prison as a result of corporate harms. Nevertheless, individuals are more than twice as likely face prison when shareholders are harmed than when other stakeholders are harmed.

Although we use the loaded word "justice" in the title, we will not be in a position to evaluate the extent to which the outcomes of corporate harm deliver meaningful justice to victims or to society as a whole and in what sense. Legal action by itself does not guarantee that either victims get appropriate remedies or that the outcomes achieve deterrence. The system may produce frivolous lawsuits and may benefit primarily third parties such as private lawyers. Market responses, which we do not study, may also be relevant.[1] Nevertheless, the questions we ask are important and our results should inform discussion of whether and which systematic distortions may arise in the way the legal system handles harms by corporations. Such discussion is key to understanding how corporate and securities laws interact with other parts of the legal system and it is also relevant to the debates concerning corporate purpose and the implications of the so-called "shareholder primacy."

As Admati (2017, 2021) discusses, corporate governance practices, including financialized metrics used to motivate managers and nominally align their interests with shareholders, may create intense conflicts that pit managers and shareholders against other stakeholders and society as a whole if governments fails to write and enforce proper laws.[2] These conflicts between corporations and those who control them on one hand and the rest of society on the other can arise not only in large public corporations with dispersed shareholders but also in private corporations with concentrated share ownership and no managers-shareholder conflicts. They conflicts arise in the interaction of corporations with the broad system of law and law enforcement that determines corporations' rights and responsibilities, including tort, contract, employment, consumer protection, etc.

Recent books by academics and others alert the public to what authors view as the poor workings of the U.S. justice system. Rakoff (2021), who has decades of experience as a prosecutor, defense lawyer, and judge, calls the system "broken" and highlights the stark contrast between the harsh treatment of many poor people suspected of minor offenses and that of corporate executives whose companies caused enormous harms yet executives face no consequences. Consistent with Garrett (2016) and Eisinger (2017), Coffee (2020) laments an "under-enforcement crisis" of corporate crime.[3] Taub (2020) decries "the shocking injustice and unseen cost of white collar

crime" and points to the lack of comprehensive data about white collar crime and corporate wrongdoings, which can hide the problem and prevent steps to address them.

The intense debate on corporate purpose, and calls and commitments claiming that corporations consider (or should consider) the welfare of non-shareholder stakeholders when making decisions also suggests that contracts and laws, which are meant to provide external constraints, fail to protect stakeholders and the public properly. If corporate managers, possibly claiming to act in the interests of shareholders, can benefit at the expense of others and avoid liability, and if they can also shape laws and enforcement, we can expect corporations to cause harm and the legal system to respond inadequately. In particular, we may see that laws and their enforcement offer fewer rights and weaker protection to customers, employees or the public relative to the rights and protections afforded managers and shareholders.

In the context of this debate, this paper is also related to Bebchuk and Tallarita (2020), who argue that "stakeholderism" can actually help advance managerial objectives only while obscuring the critical need for external forces that include effective laws and policies to protect stakeholders. Pollman (2021) points out that many recent decisions by the U.S. Supreme court that are considered "business friendly" and which empower corporations and expand their rights while weakening their external constraints through other laws result in more pressure on corporate law to deliver better outcomes for society and is reflected in the corporate purpose debate. Shareholder activism on so-called Environmental, Social, Governance (ESG) issues suggests indeed, as she points out, that the "business friendly" decisions may not actually reflect what many shareholders and other participants actually want.

The hypothetical in the epigraph reflects anecdotal evidence that the US legal system seems to protect shareholders if more actively than it protects others, consistent with our results. One prominent recent example is Purdue Pharmaceutical, whose deceptive marketing of OxyContin led to enormous suffering, including many deaths, and billions of dollars in financial harms to numerous individuals and government bodies. The company's managers and shareholders benefitted from the large profits generated opioids sales and finally the corporation filed for bankruptcy protection. Customers and their family members who were impacted by opioid addiction will likely never be fully compensated. This case also reflects the failure by the Food and Drug Administration and other agencies to accept Purdue's initial claims about the addictiveness of the drugs and to act much faster to prevent the harm.

In another recent example, Elizabeth Holmes, the founder and former CEO of the privately-held blood testing startup Theranos, was recently convicted of defrauding investors. Ms. Holmes was found not guilty on any patient-related charges even though it was the emerging and

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October, 2021 https://www.justice.gov/opa/speech/deputy-attorney-general-lisa-o-monaco-gives-keynote-address-abas-36th-national-institute As discussed later, the vast majority of corporate enforcement is done through civil settlements.

potentially enormous harm to patients that led some Theranos employees to expose the fraud at a significant cost to themselves (Carreyrou, 2018).

In this paper we aim to shed more systematic light on the workings of the legal system in a corporate context by evaluating empirically the legal consequences that may follow when corporations cause harm or break laws. Based on data from the US, we try to address the following basic questions: How does the law hold those responsible for harm by corporation accountable? To what extent, if any, do the legal consequences of corporate harm, including whether the corporation faces civil or criminal liability and whether and in what way individuals acting on behalf of the corporation might be liable, depend on whether victims are investors, customers, employees, government bodies, or the broader public? What is the effect on the consequences of the harm being physical (such as death or injury) vs. purely financial? Do securities litigations and derivative suits on behalf of shareholders help ensure that corporations comply with all laws, including those protecting other stakeholders?

We document and study the legal outcomes of corporate harms as they pertain to different types of victims and harm and whether and how corporations and/or individuals are held liable. Whether the outcomes deliver *justice* is a bigger and deeper question than what we will be able to answer. What we refer to as corporate victims "getting justice" refers only to the corporations and/or individuals facing legal consequences as a result of the harm. We will not analyze whether corporate fines and settlements are adequate for deterrence or just viewed as "cost of doing business."[4] Even with legal action, justice is often illusive. Corporate harms may be preventable by better regulations,[5] victims in a class action suit may be unaware of a settlement or receive inadequate compensation. In securities fraud cases some shareholders who claim to have been harmed by misleading disclosures may receive payment from other, often innocent, shareholders while managers responsible for fraud are not much affected and the main beneficiaries are the lawyers who initiated the action.[6] Some cases may be frivolous.

The challenge we face in studying the issue of harms by corporations and their legal consequences is the remarkable dearth of comprehensive and reliable data. The filing and outcomes of private damages lawsuits are often sealed, and arbitration processes increasingly used for customer and employee claims are also hard to evaluate. Whereas statistics about street-level crime are routinely gathered and tracked by the Department of Justice and other agencies, data about corporate prosecution and civil settlements in the private sector and at the many agencies in the federal and local levels is scattered and often inaccessible.

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[4] Atkinson (2020a), for example, estimates that 37.5% of civil environmental violations of the Clean Air Act are profitable net of penalties imposed. The reason for low penalties might be concern for the collateral harm of the fines, explicitly considered as a factor in policies of most agencies (Atkinson, 2020b).

[5] For example, Admati (2017, 2021) and earlier writings discuss the poor design of banking regulations, and product safety regulations are inadequate as discussed e.g., in Felcher (2002) and Cowles (2019).

[6] See, e.g., Bratton and Wachter (2011) on the political economy of Fraud on the Market and Choi et al (2020) on attorney fees in large securities fraud cases.

To overcome this data limitation, we have been assembling and standardizing data from a number of sources that span, to the extent possible with public data, the breadth of potential private and public legal actions against corporations, including regulatory civil and criminal actions, private securities litigation and derivative lawsuits and some class action lawsuit. We encode information on the underlying corporate wrongdoing that prompted any legal action, the victims who suffered harm, the type of harm, and the consequences for the corporation and for any individuals who may have acted on behalf of the corporation.

We consolidate our data into two datasets that serve as the background for our empirical analysis. Likely, almost all corporate harms are minor and go undetected. A small minority reach public view. One way in which corporate harms become known to the public, if the harm is sufficiently newsworthy, is through the media. Another way is if the harm is litigated and the litigation is made public through corporate, government, or individual disclosures. These two channels—media coverage and litigation—each generate a separate, though often overlapping, universe of corporate harms.

The dataset built from litigation is larger and more comprehensive, but is subject to a critical selection problem in that it ignores cases in which harm occurred that did not result in such action. Thus, it is useful for studying conditional outcomes: conditional on civil litigation occurring, we can ask what factors are associated with criminal litigation, penalties against a particular individual, or prison for a particular individual. To build a better understanding of when is legal action triggered if a corporation causes harms or breaks laws without conditioning on litigation occurring, we use the dataset build from media searches. This requires the hand-collection and coding of newspaper articles. Matching these harms to resulting legal actions allows us to examine whether these harms led to legal action on the extensive margin without having to condition on civil litigation.

2. Institutional Context and More Related Literature

Corporations have many legal rights conferred by governments and courts and they are presumed to act lawfully. When corporations cause harm or break laws, the legal consequences vary by jurisdiction. Our discussion and analysis focus on the United States, where incorporation and corporate law are controlled by states, with Delaware playing a key role. Securities laws, also important in corporate governance, are largely federal. Spamann et al (2021) provide a compact summary of the relevant corporate governance laws in the U.S. As Pollman (2019) discusses, fiduciary duties stemming from corporate case law do not generally ensure corporate obedience to the law, leaving the task of enforcement to the rest of the legal system. [7]

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[7] Pollman (2019) notes that companies may choose to break laws as they create innovative technology (Uber is a prime example), and that disobedient corporations can have impact on the evolution of laws in many areas. Certainly employment laws have been challenged by the "gig economy" in recent years.

The legal outcomes we focus on are the result of private litigation and enforcement actions by federal, state and local agencies. In our data collection, we endeavor to find comprehensive data on each avenue of redress which we detail below. Although corporations are vicariously liable even for crimes committed by anyone in the scope of their employment, the legal consequences that follow when corporations cause harm or break laws, if any, overwhelmingly involve *civil* litigation and settlements. Out of over 512,000 law violations that resulted in at least $5,000 in fines or penalties that are included in the Violation Tracker of Good Jobs First that we draw on in this paper, only 1,897 are criminal.[8]

The US legal system relies significantly on *private* civil law for law enforcement (in addition to torts). In order to succeed in suing corporations, victims must be aware that the corporation has caused harm and be able to connect the harm to the corporation, they must have standings in the law, and they typically need legal representation, which requires the ability to compensate lawyers sufficiently based on hourly or contingent fees.[9] Even if some consumers or employees can use a class action lawsuit, in many cases it appears that compensation does not reach the majority of the class members.[10]

Increasingly since the 1980's, access to civil courts and the success of corporate victims in the courts have been severely limited by a number of Supreme Court decisions. Among them are those related to arbitration and the ability to pursue class-action lawsuits. Specifically, the Supreme Court has greatly expanded the scope of the 1925 Federal Arbitration Act (FAA) and enabled corporations to include mandatory arbitration clauses and class-action waivers in contracts with consumers, employees and others. The 2011 decision in *AT&T Mobility v. Concepcion* overrode state laws that considered some arbitration agreements unconscionable and unenforceable. In a May 2018 decision (including *Epic System Corp. v. Lewis* and two other cases), the Supreme Court also ruled that arbitration agreements requiring individual arbitration are enforceable under the FAA even if they are inconsistent with allowances within the National Labor Relations Act of 1935 regarding rights to collective action for employees.

According to Szalai (2019), eighty-one of the 100 largest companies in the U.S. have policies that bar customers from bringing claims in front of a judge or a jury, and 78 of these 100 companies also prevent consumers from acting as a class. The opaque arbitration process may save

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[8] Corporate criminality has been controversial and in many jurisdictions, including in Europe, corporations cannot be charged criminally. Khanna (2004) discusses of the political economy forces that have led to increase in criminalization of corporate violation despite questionable benefits. Garrett (2016) and Coffee (2020) view corporate criminality as a tool that can be used by the government to improve corporate compliance and create better deterrence but they assess the outcomes of corporate prosecutions as disappointing (see more discussion below).

[9] Harms such as fraud, which are often invisible to outsiders and potentially obscured by those within the corporation, can persist for years and may only come to light in some cases thanks to whistleblowers or media (Dyck et al, 2010). In special cases, such as violations of the False Claims Act that pertains to situation in which the government is a victim of fraud, whistleblowers may file a lawsuit on behalf of the government through the *qui tam* process.

[10] In a study of consumer class action suits by the Federal Trade Commission, the overall claims rate of the cases in the sample was less than 10% https://www.ftc.gov/system/files/documents/reports/consumers-class-actions-retrospective-analysis-settlement-campaigns/class_action_fairness_report_0.pdf

cost, but whether it delivers more just outcomes has been quite controversial.[11] Egan et al (2021) show that corporations have significant informational and other advantages in the process that distort the outcomes against consumers and employees.

Since voluntary access to arbitration is always legal, the actions by corporations in the courts and by their lobbies around recent efforts in Congress to forbid mandatory arbitration in certain cases suggest that corporations generally fare better and are better able to conceal harms from the public through the arbitration process and class waiver. It is also interesting to note that the vast majority of private civil litigation involve corporations suing individuals, e.g., to collect debt.[12] Arbitration process are typically opaque and informal, and they are not subject to appeals even for error of fact or law.

Although it is more difficult to observe private action by consumers and employees when they are victims of corporate harms, indirect evidence suggests that, even if they are allowed access to the courts, the outcomes in many context do not act as sufficient deterrent to prevent future harms, particularly when the behavior is lawful or when regulatory agencies are weak. For example, in the area of children product safety, Felcher (2002) describes the sale of dangerous children products in the US and the efforts the manufacturers go to cover up the harm or shift the blame to parents and caregivers so as to avoid liability. Even when products are voluntarily recalled after it becomes clear that they can cause injury or death, manufacturers, who often market products without sufficient testing or consulting with experts, spend little resources trying to actually remove the products from the market and are not required to do so by law (Cowles, 2019). Had there been sufficient deterrent consequences for selling dangerous products, we would have seen swifter action in recall products.[13]

In contrast to employees and customers, shareholders in the US have expansive rights to sue corporations and officers. They can file class action lawsuits against corporations under federal securities laws claiming that misleading disclosures or lack of disclosures led to financial losses, including under the "fraud on the market" doctrine that does not require proof that disclosures directly impacted shareholders' actions.[14] In addition, shareholders can file a derivative suit in state courts such as Delaware (the most popular state of incorporation for large corporations),

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[11] In a recent development in the other direction, Amazon ended its policy mandating arbitration for customer disputes after it was flooded by 75,000 arbitration claims concerning its devices. See, e.g., "Amazon Ends Use of Arbitration for Customer Disputes," Michael Corckey, *New York Times*, July 22, 2021.

[12] See, for example, "How Debt Collectors Are Transforming the Business of State Courts," Pew Charitable Trusts report https://www.pewtrusts.org/en/research-and-analysis/reports/2020/05/how-debt-collectors-are-transforming-the-business-of-state-courts

[13] Corporations routinely cover up known harm to customers for long periods of time. Well known cases include GM ignition scandal, Wells Fargo Bank accounts opening, and many more.

[14] For a detailed discussion of the issues around Fraud on the Market shareholder litigation, a highly controversial doctrine, see Bratton and Wachter (2011). Recently, Harvard professor Hal Scott has waged a multi-year battle to persuade Johnson and Johnson shareholders to agree to arbitration clauses. For some of the context, see "The SEC's Misguided Attack on Shareholder Arbitration," Hal Scott, *Wall Street Journal*, February 21, 2019, which laments the support of shareholder litigation by the SEC despite the fact that most of them are meritless and not beneficial to most shareholders.

against officers for governance failures. Shareholders sometimes file such suits when the primary victims were customers or employees and when the actions by corporations may have been taken a-priori in the name of creating shareholder value (e.g., maximizing stock price).

Strauss (2021) finds that in a sample of securities class action lawsuits from 2010-2015 roughly 16.5% arise from conduct where the most direct victims are not shareholders. Boeing directors settled a derivative suit from shareholders in Delaware stemming from the 737 MAX crashes that killed 346 people for $237.5 million, which will be paid almost entirely by the insurance Boeing provided its directors and officers. Another shareholder lawsuit in federal courts argues that Boeing directors violated the Securities and Exchange Act.[15] Whereas shareholders class action suits are the most prevalent type, many have questioned the role and the true beneficiaries of these suits, which are typically initiated by private lawyers and ultimately shift money from one group of shareholders to another group and to lawyers.

If a corporation breaks any law, government bodies can take enforcement action against the corporation or against individuals acting on its behalf. Corporations in the US are vicariously liable, including criminally, for any action meant at least in part to benefit the corporation by any agent within the scope of employment.[16] Enforcement action may involve civil and/or criminal charges. The latter are only handled by the Department of Justice at the federal level and by criminal law enforcement authorities at the state of local level. Civil enforcement actions might be taken by agencies in the federal government or in state and local governments, depending on statues, regulation, authority, resources and discretion. For example, the Securities and Exchange Commission may charge corporations or individuals with violating the Securities Act, the Labor department may take enforcement actions related to labor laws or the Environmental Protection Agency might act to enforce the Clean Air Act.

Most corporate prosecutions for large corporations result in Deferred Prosecution Agreements (DPA) or Non Prosecution Agreements (NPAs). These agreements lack transparency and are either not subject to judicial review at all (in the case of NPAs) or are simply rubber stamped by the court, making it impossible to know whether they bring about justice. It has been rare for individuals, particularly executives, to face charges even when the corporations they have led caused significant harm that involved criminal acts.[17] Sometimes the criminal penalties for corporations are paltry and civil settlements impose larger fines. For example, Pacific Gas and Electric (PG&E) pleaded guilty in 2020 to 84 manslaughter charges and the paid a total of $4

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[15] The case has been controversial regarding the various jurisdiction and laws involved. See, for example, "Boeing's forum selection bid to send 737 MAX derivative suit to Delaware nixed by 7th Circuit," Alison Frankel, Reuters, January 22, 2022. https://www.reuters.com/legal/litigation/boeings-forum-selection-bid-send-737-max-derivative-suit-delaware-nixed-by-7th-2022-01-10/

[16] By contrast, in some other jurisdictions, e.g., U.K. or Germany, corporations may be liable only for actions by people with sufficient control.

[17] For discussion and critique of DPAs and NPAs Garrett (2016), Eisinger (2017), Coffee (2020, 2022) and Rakoff (2021).

million in total penalties and fees. [18] In April, 2022, PG&E agreed to $55 million in civil settlement, which allowed it to avoid criminal prosecution for causing large fires in 2019 and 2021, including tens of millions in payments to local organizations, schools and government agencies, and an independent safety monitor for five-years. The maximum criminal fines in the 2021 Dixie fire, which burned 963,000 acres and destroyed more than 1,300 buildings were $329,417.

Corporate settlements may include effective releases from liability for executives and officers, but individual associated with corporate wrongdoings may be the target of civil action or criminal prosecution. The Department of Justice periodically declares (first by Sally Yates that corporations must disclose information about individual wrongdoings in order to get "cooperation credits." However, it remains exceedingly rare for high level executives to face serious legal consequences. See Garrett (2020) and the specific recent example of Boeing (Coffee, 2022), where a low level test pilot was charged criminally and acquitted. It is quite clear in many cases where low level employees act on behalf of the corporation that higher ups set up incentives for these actions and that low level employees would lack a motive otherwise for taking a wrongful act. Yet, cases against high level corporate leaders remain rare. Our research aims to shed more light on these issues.

3. Data and Methodology

We first describe at a high level the methodology for creating our dataset before detailing the underlying data sources and providing summary statistics.

3.1 Methodology

The unit of observation is "corporate harm," which refers to a set of actions that led to a corporation causing harm to any stakeholder. For example, BPs actions around the Deepwater Horizon spill constitute a single corporate harm. This particular harm lead to multiple legal actions (e.g., from shareholders, from employees, and from local governments), but a corporate harm can in principle lead to zero, one, or multiple legal actions.

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[18] The 2018 fire that caused these deaths occurred within the five year period in which PG&E was under federal probation and being monitored after having been convicted in federal courts of eight counts of manslaughter and significant damage resulting from a 2010 explosion caused by poorly maintained equipment. The report issued by the monitor, (see https://www.courthousenews.com/wp-content/uploads/2021/12/pge-monitor-report.pdf) led U.S District Judge William Alsup to declare that the probation failed to rehabilitate PG&E. "In these five years, PG&E has gone on a crime spree and will emerge from probation as a continuing menace to California," he wrote. In April, 2022, PG&E paid $55 million in civil settlement related to the 2021 Dixie fire rather than face criminal prosecution over the same fire. The maximum criminal fines in the Dixie fire, which burned 963,000 acres and destroyed more than 1,300 buildings, were $329,417. Khanna (2004) argues that corporate crime legislation responds to public reaction to corporate wrongdoing but ultimately it is not as useful in practice as civil settlements and managerial liability.

The primary explanatory variable of interest associated with a corporate harm is which stakeholder type was harmed and the character of the harm. We categorize victim types into customers, employees, government, and shareholders/investors.[19] We categorize harm types into death, injury, and financial loss. The harm type-cross-victim combinations are: (1) customer death, (2) customer injury, (3) customer financial; (4) employee death, (5) employee injury, (6) employee financial; (7) government financial; (8) shareholder financial. The prototypical example of a customer death or injury is an unsafe product malfunctioning. The prototypical example of a customer financial loss is a predatory financial product. For employees, a typical employee death or injury would be an on-the-job safety issue or disaster, such as the failure of BP's Deepwater Horizon oil well. A typical government financial loss is Medicare fraud, and a typical shareholder financial loss is accounting fraud or similar financial misreporting.

The primary outcome variables are the legal actions resulting from a corporate harm. These outcomes include, e.g., whether any legal action followed, from where the legal action arose (government or private litigants), the nature of the legal action (civil or criminal), and the severity of the penalties imposed (e.g., prison for officers). As we describe below, most of the raw data is at the legal-action level. We therefore manually aggregate resultant legal actions to the underlying corporate harm from which they arose. This process is manual and involves detailed reading of case documents as well as internet searches used to assemble a general picture of what occurred.

We follow two strategies to assemble the universe of harms. The first strategy takes as a starting point media searches for corporate harm. The second strategy begins with the resultant legal actions and works backwards to determine the underlying corporate harm. The advantage of the former is that it does not condition on a legal action occurring, and is thus useful for examining the extensive margin of legal enforcement. The advantage of the latter is that it requires much less manual news searching and analysis to assemble the observable universe, and therefore leads to a much larger dataset that is useful for teasing apart differences on the intensive margin of enforcement.

Media-based universe: The media-based universe begins with targeted media searches regarding corporate harms. For each of eight harm types listed previously, we search for relevant key words[20] in the article headline or text for articles marked as being about a corporation. We run the search from 2008 through 2014. For each article returned by the search, we manually determine whether the article is relevant. For example, many articles returned by the employee-death search

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[19] We do not search for harms where one corporation harms another corporation, as these are unlikely to be reported, and more likely to be resolved through contractual negotiation. When conducting media searches for corporate harms, we focus only on customers and employees as non-shareholder/government stakeholders. When constructing data from the observed civil suits, corporate victims are occasionally "the public" more generally, e.g., residents exposed to pollution.

[20] For death: "death", "died", or "killed." For injury, "injury" or "hurt." For financial loss: "money", "dollars", "financial" combined with "loss", "deceived", "misled", or "lied". For customers: "customer" or "consumers." For employees: "employee", "worker", "contractor". For shareholders: "shareholder" or "investor". For government: "government", "agency", "treasury", "public."

detail a natural death, or a death in a natural disaster, of someone who happened to be an employee of a mentioned company.

We match each corporate harm to any associated legal actions in the datasets described below. As an additional check, we perform internet searches around the harms to cast the widest possible net over all avenues of legal enforcement.

Of course, this approach collects only a small fraction of the total universe of corporate harm. Moreover, it is not necessarily representative of all corporate harms. In particular, it introduces selection into our sample for two reasons that implicate external validity concerns when extrapolating our findings to the universe of (reported or not) corporate harms. First, our methodology implies that we include only harms that are newsworthy, and leaves out harms that are less noteworthy or likely to be of interest to the public.

Second, our sample may be biased through a causal link between news reporting and legal action. A story appearing in the news may galvanize private or public agents to pursue legal action, due to, e.g., a front-page *New York Times* story creating political pressure to take action. Additionally, ongoing public or private litigation may itself trigger reporting in the press. Both forces will mean that the harms in our universe will have a greater likelihood of generating litigation than the unreported universe.

Therefore, sample selection biases us towards observing harms that are most likely to generate legal action, and thus towards a measured level of legal action that exceeds that in the full universe of corporate harms. Importantly, however, our focus is on how the legal system treats shareholder and government victims differently from other victims, and selection bias will impact our inferences here only to the extent that the bias differentially impacts these groups. We conjecture that the forces generating this selection bias are likely more severe for non-shareholder harms. Regarding size and noteworthiness there is a long tail of small corporate harms to customers or employees, and thus our newsworthiness criterion is less representative for these cases. Regarding a possible causal link between reporting and litigation, we conjecture this will be less severe in the case of a general interest media source like the *New York Times*, which is unlikely to be the primary source of information for litigious shareholders. Thus, if anything, selection bias will lead to a smaller measured difference between shareholder and non-shareholder legal actions. We view our estimates therefore as a lower bound of the difference in the provision of legal outcomes between shareholder and other stakeholders.

Additionally, we will miss some legal processes because they are difficult to observe. The missing data will affect our conclusions about the overall level of consequences for corporate harms, but will only impact the point of interest of this paper—differential treatment for different stakeholders—to the extent that the observability of legal consequences differs by victim type. There are reasons to think such differences in observability exist. For example, harms against consumers or employees are more likely to be resolved through extra-legal arbitration agreements. We may therefore incorrectly conclude that there is little provision of justice for customer or

employee harms when in fact the avenue of justice are simply harder to observe. As discussed in the previous section, we have indirect evidence that as a whole remedies for employees and customers, at least in cases that do not become major news, tend to either be nonexistent or too small to have much impact on corporate behavior. Nevertheless, we take this potential pitfall seriously and employ robustness checks—including legal decisions during our time period, to address it. We are also exploring additional sources of information about class action suits by non-shareholder stakeholders.

Legal action-based universe: The legal action-based universe takes observed legal actions from several datasets, described below, and reverse-engineers the underlying corporate harm. We fill out the necessary details (e.g., the company, who was harmed, and how) using associated legal documents, press releases, and internet searches. It is often the case that a single harm leads to multiple legal actions, so this strategy necessarily requires some aggregation across legal actions. Once aggregated to the harm level, as a robustness check we perform manual internet searches for each harm to fill out any undiscovered legal actions.

The primary drawback of this dataset is that it conditions on there being some observable legal action. Thus, it is unsuitable for studying the extensive margin of enforcement. However, the dataset is useful in studying the intensive margin of enforcement: For example, we can ask, conditional on there being a civil suit, how does the probability of criminal action or jail vary with the characteristics of the underlying harm or harmed party.

3.2 Data sources

Addressing our question requires tracking a corporate harm from commission through all possible avenues of legal action. To our knowledge, no existing dataset is up to the task. A particularly challenging requirement of our question is that the data span a sufficiently large breadth of victim and harm type. In particular, administrative data focusing on a particular law or agency, e.g., workplace safety violations, while highly detailed, would not allow for such a comparison. Rather, we approach the problem by systematically defining a broad universe of corporate harms against various stakeholders reported in the media and tracing out, to the extent possible, legal actions arising from them.

Media searches: We form our basic universe of analysis using a systematic media search on LexisNexis for corporate harms. For our main analysis, we search for articles published in the New York Times[21] between 2008 and 2014 detailing corporate harms that lead to various harm types and victims. Thus, our observable universe consists of corporate harms reported in the national news media that fit our search criteria.

Good Jobs First Violation Tracker: Our main source of information regarding legal actions against corporations comes from Good Jobs First Violation Tracker. According to the Good Jobs

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[21] In ongoing data collection work, we look for other national and local media sources.

First website[22] it is a wide-ranging database on corporate misconduct. It covers a wide variety of harm types and victims, and includes cases from the federal government, state governments, as well as private litigation. In total, it includes more than 512,000 civil and criminal cases. The dataset includes the company name, links to primary legal sources (e.g., criminal complaints or DOJ press releases), and amounts of penalties assessed. It does not, include whether individual corporate officers received financial penalties or went to jail, so we supplement these outcomes with manual internet searches to form a more complete picture.

It is important to note that the unit of observation in Good Jobs First is a legal action, and not a corporate harm per se. One corporate harm may generate multiple (or none) legal actions. Therefore, using a combination of linked primary material (e.g., criminal complaints) as well as internet searches, we aggregate the Good Jobs First cases to the level of a single corporate harm, as we describe below.

A key limitation of the Good Jobs First dataset for our question is that it conditions on there being a legal action in the first place that resulted in the corporation paying at least $5,000 in fines and penalties. Thus, whereas it is a useful resource for studying legal outcomes by harm type *conditional* on there being a legal action, it is not a helpful starting place when studying the extensive margin of legal enforcement. This is why we begin with our universe of harms generated through news searches to study this question.

Corporate Prosecution Registry: We supplement the Good Jobs First data with Brandon Garrett's Corporate Prosecution Registry. While somewhat overlapping with the Good Jobs First data in terms of criminal prosecutions, this dataset includes additional corporate criminal prosecutions obtained through federal docket sheets, prosecutor's offices, and FOIA requests. Like the Good Jobs First dataset, it is at the legal-action level and contains information about the company, the prosecuting agency or office, and the legal outcome.[23]

Stanford Securities Litigation Analytics (SSLA): The Stanford Securities Litigation Analytics dataset[24] tracks private shareholder securities litigation as well as public enforcements by the SEC and DOJ from 2000 against regulated corporations. Cases in this dataset concern misstatements or omission of material information that negatively impact the security's valuation. As with the Corporate Prosecution Registry, these cases often overlap with the Good Jobs First data, but coverage is more comprehensive and the data contain more detailed information on case outcomes.

Unstructured internet searches: While the above data and media sources comprise the bulk of the input for our data collection and standardization efforts, we supplement each harm with unstructured internet searches around outcomes. These searches help us fill in the gaps for missing

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[22] https://www.goodjobsfirst.org/violation-tracker
[23] This registry includes also cases in which DoJ declined to prosecute or more generally where the outcome did not include the corporation paying fines. These cases will not be included in the Good Jobs First data.
[24] https://sla.law.stanford.edu/about

legal actions that were not included in the above sources. These include, for example, civil cases or settlements that were missed by Good Jobs First, as well as derivatives lawsuits which we obtain from Lexis searches.

3.3 Summary statistics

Summary statistics for our final datasets are shown in Table 1 for the article-based dataset used for analysis on the extensive margin and Table 2 for the case-based dataset used for analysis on the intensive margin. Table 1 Panel A shows that among the 286 articles-based harms we collected occurring between 2007 and 2014, roughly 12% have customers suffering a financial harm, 10% have customers suffering a physical (non-death) harm, and 7% have customers suffering death. 1.5% of harms have employees suffering a financial harm, 13% have employees suffering a physical harm, and 35% have employees suffering death. Shareholders are harmed in roughly 38% of harms, and the government is harmed in roughly 5% of the harms. 60% lead to civil litigation; 10% lead to criminal litigation, and 26% lead to securities litigation.

Table 1 Panel B breaks out this information by harm type. There is significant heterogeneity in the preceding stats by the type of harm. For example, by definition, all workplace safety harms fall on employees; accounting fraud typically harms shareholders but sometimes harms the government in cases where the government was a guarantor or insurer (e.g., in mortgage fraud cases). Civil cases occur fairly regularly across various harm types, while criminal cases are concentrated in cases of fraud. Securities cases do not occur in workplace safety harms, while they are much more likely in cases of general fraud or accounting fraud more specifically.

Table 2 Panel A shows summary statistics for the case-based dataset. Of the 1,798 harms we examine, 20% have a customer or employee harmed, 9% have an injury or death. 8.5% have shareholders harmed, and 31% have the government harmed. 85% of the harms have an associated civil case, and 23% have an associated criminal case. In 19% of the harms there is a case brought against an individual and in less than 5% of cases, a defendant is sent to prison. As above, there is significant heterogeneity by case type. Table 2 Panel B shows, for example, that 40% of product safety cases result in injury or death, while, not surprisingly, 0% of accounting fraud cases do. Customers are harmed in 80% of price fixing cases while shareholders are essentially never directly harmed by price fixing. Fraud (including accounting fraud) generally tends to result in cases against individuals, while product or food safety almost never does. The above is a sampling of the heterogeneity that we exploit more systematically in the following empirical analysis.

4. Empirical Analysis

We now examine the relationship between who is the victim of a corporate harm and the resulting legal actions. We examine this question along two margins: First, using the articles-based dataset, we examine which victims are more likely to lead to litigation of some kind. Second, using the litigation-based dataset, we examine, conditional on there being civil litigation, how the victim's role relates to various avenues for corporate justice: when is there a criminal case, when

is action brought against an individual within the corporation, and when is an individual sent to prison. Broadly, we will find robust evidence that litigation is more likely and more severe when the corporation harms shareholders as compared to when it harms other stakeholders like customers or employees.

4.1 Enforcement on the extensive margin

Using the articles-based dataset, we investigate how the identity of the harmed stakeholder correlates with follow-on litigation. We run the following regression at the harm level:

$$Litigation_i = \beta_0 + \beta_1 Shareholders_i + \beta_2 Government_i + \gamma_i + \epsilon_i \qquad \text{(X)}$$

Litigation$_i$ is a zero-one indicator for whether there is litigation associated with the harm. We examine whether there is *any* litigation, as well as breakdowns by litigation type: securities-related litigation, which includes litigation from shareholders, the SEC, and derivative lawsuits; (non-securities) civil litigation, which includes any observable civil legal actions (including settlements); and (non-securities) criminal litigation.

Shareholders$_i$ is a zero-one indicator for whether shareholders lost directly as a result of the harm. This includes, e.g., accounting fraud, but excludes indirect shareholder harms, such as the price of the stock declining due to expected litigation over an industrial accident. *Government*$_i$ is a zero-one indicator for whether the government lost directly as a result of the harm. The prototypical example would be a harm alleged under the False Claims Act. Because someone was necessarily harmed for the incident to appear in the dataset, the constant picks up the base rate of litigation when another stakeholder, i.e., a customer or employee, is harmed. Some specifications include harm-type fixed effects, γ_i.[25]

We present the results in Table 3. Panel A is the baseline specification without harm type fixed effects; Panel B includes harm type fixed effects. Column (1) examines the probability of any type of litigation. The intercept, which we interpret as the base rate of enforcement (conditional on the harm being reported in the news) when a non-shareholder or government stakeholder is harmed, is roughly 0.55. That is, among our documented harms, when an employee or customer is harmed, there is litigation in roughly 55% of cases. When shareholders are harmed, this increases by 35 percentage points. In other words, in events where corporate officers harm shareholders, there is litigation roughly 90% of the time, while in events where corporate officers harm customers or employees, there is litigation in only 55% of cases. Cases where the government is harmed are not meaningfully different in terms of all litigation types.

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[25] These are: off-label drug marketing, drug/medical fraud, general fraud, price fixing, controlled substance violations, food safety, product safety, money laundering, excise/tax fraud, accounting fraud, economic sanctions violations, and other.

Columns (2)—(4) examine different case types: (non-securities) civil cases, (non-securities) criminal cases, and securities cases.[26] As above, the base rate for civil lawsuits in our sample is roughly 50% for harms without direct shareholder or government losses. When shareholders are harmed, non-securities lawsuits are roughly 18 percentage points more likely to occur, while there is little different when the government is harmed. Column (3) examines the likelihood of criminal litigation. The base rate is extremely low, at roughly 5%. However, criminal litigation is roughly 10 percentage points more likely to occur when shareholders are harmed, and more than 30 percentage points more likely to occur when the government is harmed. Thus, criminal enforcement actions are two- to six-times more likely to occur in these cases. Finally--- and not surprisingly---securities litigation is by-far the most likely to occur when shareholders are harmed, and to a lesser extent, when the government is harmed. It is highly unlikely to occur when only customers are directly harmed. Figure 1 Panel A shows these results graphically.

The preceding evidence paints a clear picture: when corporations harm their shareholders, there is a high likelihood of resultant legal action. This is true across the spectrum of legal remedies, including civil, criminal, and the various types of shareholder litigation. The same is largely true of harms to the government: harm to the government are much more likely to result in criminal litigation. In contrast, the base rate of litigation arising out of harms that do not directly harm shareholders or the government is much lower. The base rate given our sample is roughly 50% for any kind of litigation and only 5% for criminal litigation.

Our data, however, is not a representative sample of harms: these base rates condition on the harm appearing in a *New York Times* article. This approach likely leads to upward-biased estimates of the frequency of litigation resulting from harms related to non-shareholder or government stakeholders for two reasons. First, the harm must be sufficiently severe to be newsworthy, and we conjecture that more severe harms are more likely to lead to litigation.[27] Thus, by only focusing on newsworthy harms, we are likely overstating the likelihood of litigation relative to a broader universe. Second, a harm's appearing in the media may causally increase the likelihood of litigation, as it galvanizes plaintiffs and regulators to take action. In sum, due to how our sample is constructed, we are likely placing an upper bound on the probability of litigation on harms related to non-shareholder or government stakeholders.

A potential confounder in our analysis is that harms where customers or employees are victims are often resolved through arbitration, and that the presence of arbitration is difficult to observe through public channels. (At this point, in any case, we do not have this information.) To address this concern, we redo the preceding analysis but make use of the 2010 Supreme Court Decision, *ATT Mobility LLC v. Concepcion*. This case held that state laws prohibiting arbitration in class action lawsuits were preempted by a Federal statute that allows them. To the extent that

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[26] In our context, securities cases refer strictly to those from the SSLA dataset, i.e., cases from shareholders alleging misstatements or omissions of fact or from the SEC, or derivatives lawsuits.

[27] Indeed, in subsequent sections, we show that the probability of a criminal case is higher when the harm resulted in injury or death.

our analysis suffers from a large number of unobservable consequences that occur through arbitration, we would expect this problem to worsen after the decision. In Appendix Table A.1 we include an indicator for whether the harm occurred post-*Concepcion* and find no effect, which lends credibility to the notion that at least in our sample, we are not missing a large number of consumer/employee legal consequences due to unobserved arbitrations. We show these differences graphically across time in Figure 1 Panel B.

The preceding analysis does not condition on the law being violated, which means that our observed differences may be driven by the type of legal remedy available for a given harm type. For example, the law criminalizes accounting fraud, which typically harms shareholders, but does not criminalize (only offers civil remedies for) false advertising, which typically harms customers. Hence, on this basis of our analysis, one should not conclude that prosecutors or potential litigants are acting on their own discretion in a way that favors shareholder interests over other stakeholders. Rather, our analysis shows that the legal system leads to more action when shareholder interests are harmed through a combination of the available remedies *or* systematic differences in enforcement. Irrespective of the mechanism, this is the first order conclusion.

Nevertheless, to shed more light on whether it is the set of remedies available or the uneven enforcement of these remedies, we redo our analysis conditioning on the type of violation. The motivation for this analysis is that different harm types correspond to both different victims on average as well as different availability of legal remedies. For instance, harms to employees tend to be workplace safety issues, and workplace safety laws provide different remedies than securities laws. Finding an effect both with and without conditioning on the harm type suggests that selective enforcement drives the main result. In contrast, finding no effect after conditioning on harm type suggests the results are driven by the endogenous choice of legal remedies available, rather than by selective enforcement.

Operationally, this means to include harm-type fixed effects in the regression. This analysis exploits within-harm type variation in victimhood by comparing, for example, cases of fraud where a shareholder is a victim to cases of fraud where a consumer or the government is a victim. Table 3 Panel B shows these results, with outcomes analogous to the previous analysis: Column (1) examines whether there is any legal action; (2) whether there is a non-securities civil action; (3) whether there is a non-securities criminal action; and (4) whether there is a securities action.

The differences in outcomes by harmed party change dramatically in this within-harm-type analysis. We find only slight differences in outcomes between shareholder harms and other stakeholder harms. This finding suggests that most of the differences in enforcement stem from choices regarding available remedies rather than selective enforcement. The primary exception to this finding is in Column (3). We find that even after conditioning on the harm type, when the government is harmed, criminal litigation is much more likely to occur. In other words, the

government is more aggressive in pursuing criminal actions against corporations when it is the victim.[28]

4.2 Enforcement on the intensive margin

The analysis in the previous section found large differences in the likelihood of a corporate harm leading to litigation depending on the victim's identity. Broadly, harms to shareholders or the government are more likely to be associated with litigation---particularly criminal litigation---than harms to customers, employees, or other stakeholders. This analysis took newsworthy harms as a starting place and looked for legal actions as an outcome.

In this section, we use a much larger dataset that takes civil litigation as the starting point[29] and examine more detailed outcomes: whether there is additionally criminal litigation, whether litigation targets individuals within the corporation, and whether any individual within the corporation is sentenced to prison. In principle, one could do this exercise with the articles-based dataset. However, due to the labor intensive nature of uncovering these harms, starting with civil litigation allows us to take advantage of others' data collection effort as a starting place to construct our universe.

The main specification is at the harm level and regresses legal outcomes on characteristics of the harm:

$$Outcome_i = \beta_0 + \beta_1 Shareholders_i + \beta_2 Government_i + \gamma_i + \epsilon_i \qquad (X)$$

$Outcome_i$ is a zero-one indicator for whether there is a criminal action, an action against an individual working for the corporation, or whether an individual working at the corporation goes to prison. $Shareholders_i$ is a zero-one indicator for whether shareholders lost directly as a result of the harm. $Government_i$ is a zero-one indicator for whether the government lost directly as a result of the harm. The constant picks up the base rate of litigation when another stakeholder, i.e., a customer or employee, is harmed. Some specifications include harm-type fixed effects, γ_i and controls for whether someone sustained injury or death as a result of the harm.

Table 4 Panel A shows the results for whether there is a criminal case. Observe in Column (1) that even after conditioning on there being a civil action, the base rate of criminal action is very low at 7.4%. When the government is harmed, there is a much higher rate of criminal actions, by roughly 7 percentage points. Interestingly, after conditioning on there being a civil case, shareholder harms are not differentially more likely to lead to criminal charges. Including controls

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[28] Notably, the False Claims Act, which deals with fraud against the government, provide significantly more options to whistleblowers than other laws in the form of qui tam options that enable a whistleblower to file suit on behalf of the government if the government fails to take action.

[29] There are a small number of cases where we can find a criminal case but no accompanying civil case. We choose to exclude these cases from our analysis (and therefore do not analyze whether there is a civil case) on this dataset because doing so introduces an unusual sampling bias into our results where we would be conditioning directly on an outcome: E[Civil case | In sample] = E[Civil case | Civil case or criminal case].

for the harm causing injury or death, and looking within harm types as in columns (2) and (3)—(4), respectively, does not meaningfully alter the results.

Panel B examines whether there is litigation targeting an individual (as opposed to the corporation) arising out of the harm. The base rate of individual-targeting litigation is 12% among harms that have civil litigation. Without harm type fixed effects—shown in columns (1) and (2)—this rate this increases dramatically by 45 percentage points in cases where shareholders are harmed. There is a statistically significant but quantitatively small decrease in the likelihood when the government is harmed.

After conditioning on the harm-type, shown in columns (3) and (4), these differences shrink dramatically, although they remain quantitatively large given the base rate. Within a harm type, harms to shareholders are roughly 6.5% more likely to result in litigation against individuals relative to the 12% base rate—a 50% higher likelihood. Hence, whereas most of the effect appears to be driven by the fact that the legal system provides more remedies against individuals for the types of harms that fall on shareholders, even within the available legal remedies, enforcement is more likely to target individuals when shareholders are harmed.

Panel C examines whether anyone working for the corporation is sent to prison because of the harm. The base rate of individuals going to prison among our set of harms is very low: roughly 1.5%. However, the rate more than doubles when shareholders are harmed, increasing by roughly 2.5 percentage points, as shown in column (1). Column (2) shows that controlling for the severity of the harm, e.g., whether there is injury or death, does not meaningfully alter these conclusions. Including harm type fixed effects lowers the significance of the estimated coefficient on shareholder harms but the level remains unchained, as shown in Columns (3) and (4). Conditioning on the harm does, however, reveal that when the government is harmed, the likelihood of prison increases by roughly 1.6 percentage points (i.e., doubles relative to the base rate) when comparing within harm type. Figure 2 shows these results graphically.

As above, we do robustness analysis for these findings around the *Concepcion* decision. These results are presented in Appendix Table A.2. On the likelihood of there being a criminal case, we find a significant but quantitatively small decrease (Panel A Column (1)). To the extent that *Concepcion* was biasing our analysis against finding legal consequences cases for smaller employee/customer harms, we would expect a positive coefficient. Post *Concepcion*, assuming more severe harms are less likely to go through arbitration, the underlying harm leading to a civil case would have to be worse for it to appear in our dataset. Thus, the likelihood of a criminal action conditional on there being a civil case would increase. Because we see, if anything, the opposite, we argue this is likely to be a small factor in our analysis. Other outcomes (individual defendants or prison shown in Panels B and C) have no relationship to *Concepcion*.

These findings on the intensive margin of enforcement complement and reinforce those on the extensive margin. Conditional on there being civil litigation arising out of the harm, we find that broadly, there is more targeted and potentially more consequential enforcement in the case of

harms to shareholders and the government. To the extent that enforcement against individuals within the corporation—particularly when the outcome is prison—has a greater deterrence effect on future harm, our findings here reinforce the broader theme that the legal system provides more deterrence against harms to shareholders than it does for other harmed parties.

5. Concluding Remarks

Laws and their enforcement mechanisms in each jurisdiction are endogenously determined by many people and institutions across the government and the private sector. How the legal system interacts with corporations and their stakeholders is a vast topic that we were only able to scratch the surface of but our analysis raises numerous questions and calls for more exploration. Our aim in this paper was to take a comprehensive and systematic approach to the question of whether and how the potential legal outcomes of corporate harm may vary by stakeholders and harm types, and we did this without getting too much into the granular details affecting the different laws that obviously matter for what we observe. Different laws would give rise to a set of issues having to do with the political economy around the language of the law, the agencies involved and those within them making decisions, etc.

Our results suggest that there are clear patterns one can refer to as "shareholder primacy" not only in the standard corporate governance and purpose frameworks but also in the context of the legal consequences of harm, at least in the US. Specifically, the likelihood of there being legal consequences against the corporation and against individuals, including criminally, is much higher when victims are shareholders relative to other stakeholder types. The government is also more aggressive in prosecuting individuals criminally when it is a victim of corporate actions.

The general area of corporations and the legal system appears ripe for more study so as to understand better the underlying reason for our findings as well as explore other questions that are beyond our scope at this point. For example, might there be cost effective regulations that can prevent corporate harms and obviate the need to respond to them when they happen, which is likely less satisfactory and more costly? If regulations of enforcement processes appear distorted, what is the reason and what can be done? Can whistleblower policies improve to help detection of corporate harms as well as accountability?

Delving into the many questions in the context of the US, as well as trying to do an analysis such as ours and examine the issues in different jurisdictions, would be interesting and important. In the area of consumer product safety, for example, regulations are much more effective in preventing harm in Europe. Such regulations are virtually nonexistent in the US and the Consumer Product Safety Commission relies on voluntary recalls that fail to remove dangerous products from the markets (Cowels, 2019).

Our conclusions are in line with concerns, expressed in Admati (2021) that governance failures at the nexus of the interactions between governments, corporations and the public are

among the underlying causes of the apparent crisis in the "free market capitalism," where corporations control the vast bulk of economic activity, and democracy. The interactions play out in markets, in the political arena, and through the details of laws and law enforcement that are the topic of this paper. By exploring this rich area, economists and legal scholars can help diagnose the source of distortions in our system and help to create the will to improve it.

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Appendix: Tables and Figures

Table 1: Summary Statistics for Articles-Based Data

This table shows summary statistics for the articles-based dataset. That is, this is the data created using harms uncovered from media searches merged to Good Jobs First, SSLA, derivatives lawsuits, and unstructured internet searches. Panel A shows summary statistics overall. Panel B shows summary statistics by harm type, which are listed on the first column, together with counts and the fraction of harms and legal outcomes by harm type.

Panel A: Summary Statistics

Variable	N	Mean	Min	Max
Harm start	286	-	2007	2014
Customers harmed				
Financial	286	0.115	-	-
Physical	286	0.098	-	-
Death	286	0.073	-	-
Employees harmed				
Financial	286	0.014	-	-
Physical	286	0.133	-	-
Death	286	0.350	-	-
Shareholders harmed				
Financial	286	0.378	-	-
Government harmed				
Financial	286	0.045	-	-
Litigation				
Civil	286	0.591	-	-
Criminal	286	0.105	-	-
Securities	286	0.266	-	-

Panel B: By Harm Type

Harm Type	N	Customer harmed	Employee harmed	Shareholder/ Investor harmed	Government harmed	Civil case	Criminal case	Securities litigation
Workplace Safety	90	0.000	1.000	0.000	0.000	0.467	0.056	0.000
Other	30	0.267	0.367	0.300	0.033	0.300	0.100	0.133
Product Safety	22	0.591	0.409	0.000	0.000	0.545	0.000	0.045
Drug/Medical	7	1.000	0.000	0.143	0.000	0.714	0.000	0.000
Food Safety	4	1.000	0.000	0.000	0.000	0.500	0.000	0.000
Controlled Substances	1	1.000	0.000	0.000	0.000	0.000	0.000	0.000
Fraud	113	0.239	0.000	0.805	0.000	0.770	0.142	0.549
Acct. Fraud	19	0.053	0.000	0.368	0.632	0.632	0.316	0.474

Table 2: Summary Statistics for Case-Based Data

This table shows summary statistics for the case-based dataset. That is, this is the data created using case-level data from the Good Jobs First and the SSLA dataset, aggregated to the corporate harm level. Panel A shows summary statistics overall. Panel B shows summary statistics by harm type, which are listed on the first column.

Panel A: Summary Statistics

Variable	N	Mean
Consumer or employee harmed	1,798	0.217
Injury or death	1,798	0.093
Shareholders harmed	1,798	0.086
Government harmed	1,798	0.318
Civil Case	1,798	0.846
Criminal Case	1,798	0.232
Case against an individual	1,798	0.194
Securities litigation	1,798	0.058
Defendant to prison	1,798	0.046

Panel B: By Harm Type

Harm Type	N	Civil case	Criminal case	Case vs individual	Securities litigation	Defendant to prison	Injury or death	Consumer or employee harm	Shareholders harmed	Government harmed
Off-Label	64	0.938	0.531	0.125	0.047	0.047	0.219	1	0	0.750
Drug/ Medical	73	0.740	0.603	0.466	0.068	0.096	0.370	0.397	0.014	0.301
Fraud	50	0.220	0.860	0.520	0.060	0.320	0.080	0.420	0.160	0.640
Price-Fixing	199	0.558	0.608	0.307	0.020	0.131	0	0.804	0.005	0.221
Substances	110	0.973	0.091	0.136	0.009	0.036	0.345	0.264	0.018	0
Food Safety	48	0.479	0.604	0.438	0	0.062	0.125	0.021	0	0.042
Product Safety	186	0.995	0.011	0.032	0.005	0	0.419	0.441	0	0
AML	119	0.773	0.294	0.143	0.025	0.059	0	0.008	0	0.017
Tax Fraud	245	0.788	0.233	0.086	0	0.029	0	0.004	0	0.551
Sanctions	460	0.970	0.048	0.011	0	0.002	0	0	0	0.524

Table 3: The Extensive Margin of Enforcement

This table shows how enforcement varies by harmed party and harm type on the extensive margin. The sample is constructed from media searches. The analysis conditions on a harm being reported in the media and examines whether there is any case, a non-securities civil case, a non-securities criminal case, and a securities case. In all cases there is a harm of some type. *Shareholders harmed* and *government harmed* is a 0-1 indicator for whether shareholders or the government suffered a financial loss or other loss to their interests. The omitted category is therefore other stakeholders suffering death, injury, or financial loss. Panel A is the baseline regression with no fixed effects. Panel B includes harm-type fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Baseline Specification

	Any	Civil	Criminal	Securities
	Dependent variable: Litigation			
	Any	Civil	Criminal	Securities
	(1)	(2)	(3)	(4)
Shareholders harmed	0.347***	0.176***	0.109***	0.489***
	(0.054)	(0.060)	(0.037)	(0.047)
Government harmed	0.064	-0.066	0.336***	0.318***
	(0.126)	(0.140)	(0.086)	(0.108)
Constant	0.552***	0.527***	0.048**	0.067**
	(0.034)	(0.038)	(0.023)	(0.029)
Harm type FE	N	N	N	N
Observations	286	286	286	286
R^2	0.128	0.033	0.069	0.283
Note:				**p<0.1; **p<0.05; ***p<0.01*

Panel B: Harm-type Fixed Effects

	Any	Civil	Criminal	Securities
	Dependent variable: Litigation			
	Any	Civil	Criminal	Securities
	(1)	(2)	(3)	(4)
Shareholders harmed	0.025	-0.141	0.079	0.192***
	(0.083)	(0.093)	(0.060)	(0.072)
Government harmed	-0.332*	-0.472**	0.275**	0.017
	(0.193)	(0.217)	(0.140)	(0.168)
Harm type FE	Y	Y	Y	Y
Observations	286	286	286	286
R^2	0.228	0.134	0.074	0.353
Note:				**p<0.1; **p<0.05; ***p<0.01*

Table 4: The Intensive Margin of Enforcement

This table shows how enforcement varies by harmed party and harm type. The sample is constructed from the Good Jobs First dataset. The analysis conditions on there being a civil case and examines whether there is a criminal case in Panel A, an individual defendant in Panel B, and whether an individual is sent to prison in Panel C. The outcome variable is a zero-one indicator in each panel. *Shareholders harmed* and *government harmed* is a 0-1 indicator for whether shareholders or the government suffered a financial loss or other loss to their interests. *Injury or death* is a 0-1 indicator for whether there was resulting injury or death from the harm. . The omitted category is therefore other stakeholders suffering death, injury, or financial loss, captured by the constant term. Columns (3) and (4) in each panel include harm type (e.g., drug/medical, food safety, accounting fraud, etc.) fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Is there a criminal case?

	Dependent variable:			
	Criminal case			
	(1)	(2)	(3)	(4)
Shareholders harmed	-0.006	0.001	0.011	0.011
	(0.026)	(0.026)	(0.033)	(0.033)
Government harmed	0.072***	0.078***	0.063***	0.062***
	(0.016)	(0.016)	(0.017)	(0.017)
Injury or death		0.056**		-0.016
		(0.025)		(0.027)
Constant	0.074***	0.066***		
	(0.010)	(0.010)		
Harm Type FE	N	N	Y	Y
Observations	1,522	1,522	1,522	1,522
R^2	0.013	0.016	0.221	0.221
Note:				*p<0.1; **p<0.05; ***p<0.01

Panel B: Is there an individual defendant?

	Dependent variable:			
	Individual defendant			
	(1)	(2)	(3)	(4)
Shareholders harmed	0.456***	0.451***	0.065*	0.065*
	(0.029)	(0.029)	(0.038)	(0.038)
Government harmed	-0.034*	-0.039**	0.018	0.018
	(0.019)	(0.019)	(0.020)	(0.020)
Injury or death		-0.042		-0.052*
		(0.029)		(0.031)
Constant	0.122***	0.128***		
	(0.011)	(0.012)		
Harm Type FE	N	N	Y	Y
Observations	1,522	1,522	1,522	1,522
R^2	0.143	0.145	0.291	0.292
Note:				*p<0.1; **p<0.05; ***p<0.01

Panel C: Does an individual go to prison?

	Dependent variable:			
	Individual to prison			
	(1)	(2)	(3)	(4)
Shareholders harmed	0.024**	0.025**	0.027	0.027
	(0.012)	(0.012)	(0.017)	(0.017)
Government harmed	0.006	0.006	0.016*	0.016*
	(0.008)	(0.008)	(0.009)	(0.009)
Injury or death		0.004		-0.009
		(0.012)		(0.014)
Constant	0.016***	0.015***		
	(0.005)	(0.005)		
Harm Type FE	N	N	Y	Y
Observations	1,522	1,522	1,522	1,522
R^2	0.003	0.003	0.031	0.031
Note:				*p<0.1; **p<0.05; ***p<0.01

Figure 1: Extensive Margin of Enforcement

This table shows how enforcement varies by harmed party and harm type on the extensive margin. The sample is constructed from media searches. The analysis conditions on a harm being reported in the media and examines whether there is any case, a non-securities civil case, a non-securities criminal case, and a securities case. Panel A shows the results by litigation type. Panel B shows the results over time for *any* case. Error bars in Panel B are 95% confidence intervals.

Panel A: Litigation by harmed party

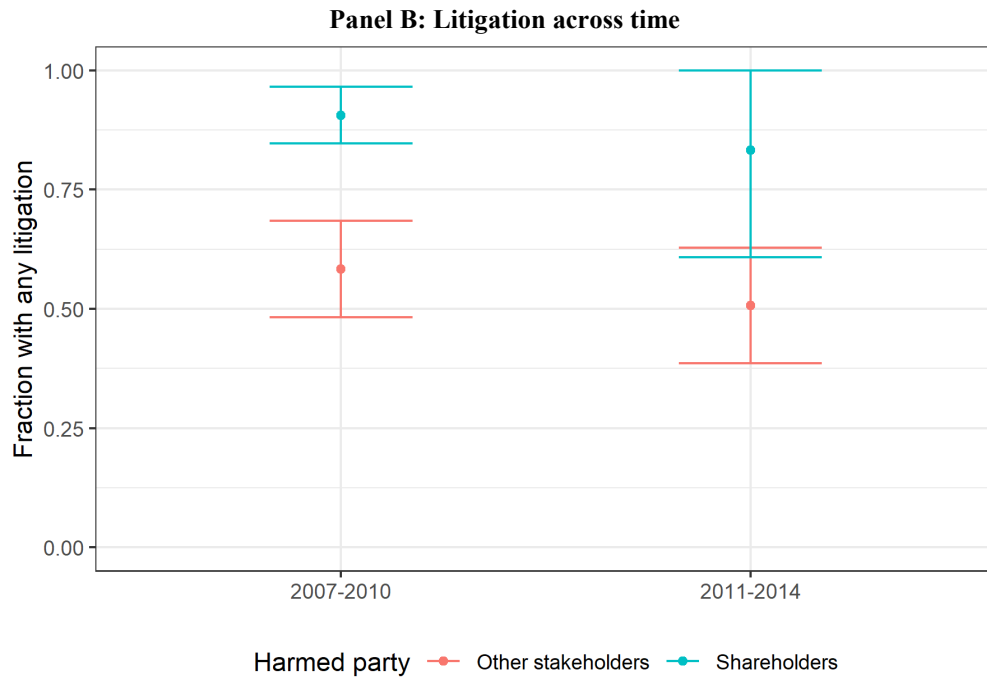

Panel B: Litigation across time
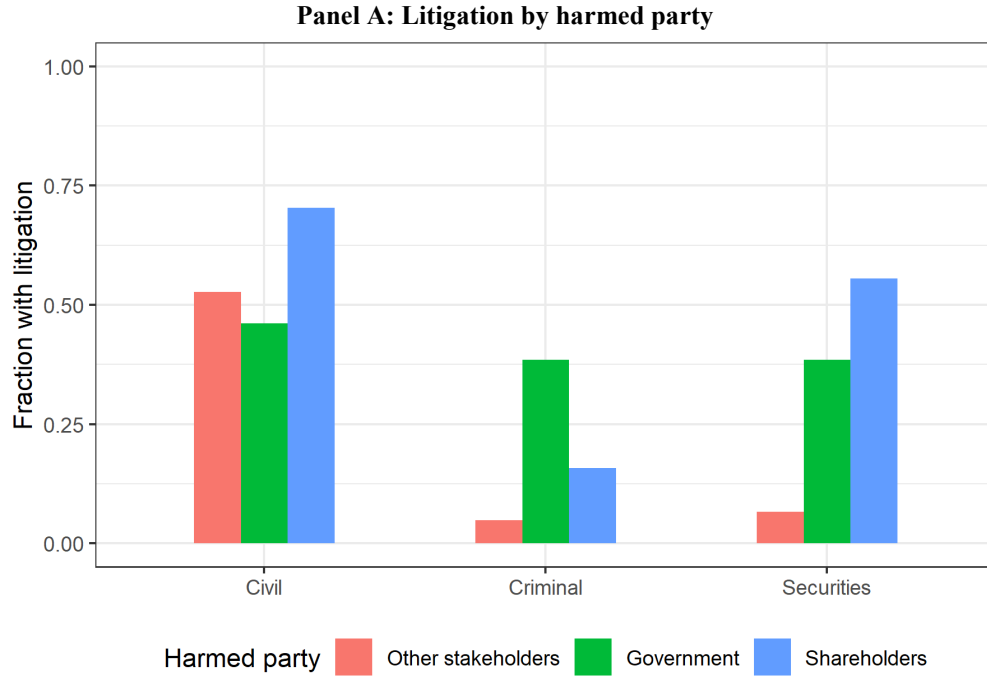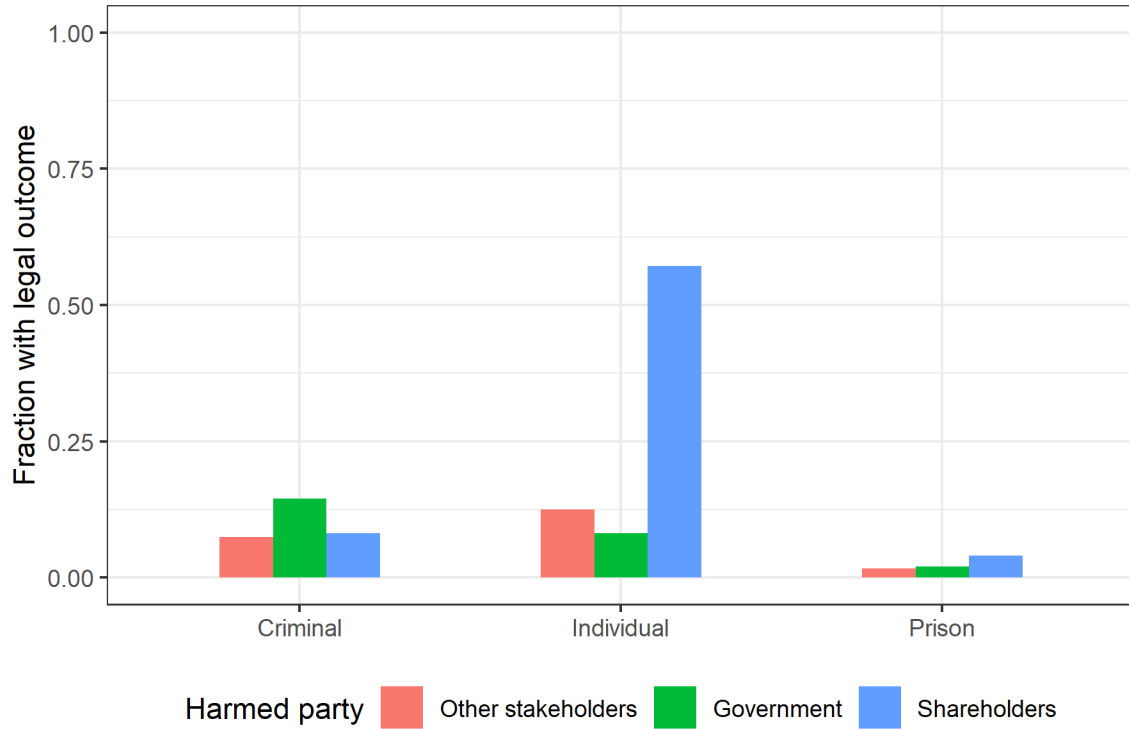
Figure 2: Intensive Margin of Enforcement

This table shows how enforcement varies by harmed party. The sample is constructed from the Good Jobs First dataset. The analysis conditions on there being a civil case and examines whether there is a criminal case, a case against an individual, and whether an individual is sent to prison. The outcome variable is a zero-one indicator.

Appendix Table A.1: Robustness—Extensive Margin and Arbitration

This table shows how enforcement varies by harmed party and harm type on the extensive margin with an added robustness check for arbitration. The analysis mirrors that in the main text but includes an indicator for whether the harm occurred after AT&T Mobility LLC v. Concepcion, which greatly eased the use of out-of-court arbitration. The sample is constructed from media searches. The analysis conditions on a harm being reported in the media and examines whether there is any case, a non-securities civil case, a non-securities criminal case, and a securities case. In all cases there is a harm of some type. *Post Concepcion* is a 0-1 indicator for whether the harm occurred after 2010, the year in which *Concepcion* was decided. *Shareholders harmed* and *government harmed* is a 0-1 indicator for whether shareholders or the government suffered a financial loss or other loss to their interests. The omitted category is therefore other stakeholders suffering death, injury, or financial loss. Panel A is the baseline regression with no fixed effects. Panel B includes harm-type fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Baseline Specification

	Dependent variable: Litigation			
	Any	Civil	Criminal	Securities
	(1)	(2)	(3)	(4)
Post *Concepcion*	0.040	0.067	-0.067*	0.092**
	(0.052)	(0.058)	(0.035)	(0.044)
Shareholders harmed	0.349***	0.180***	0.105***	0.494***
	(0.054)	(0.060)	(0.037)	(0.046)
Government harmed	0.062	-0.070	0.340***	0.312***
	(0.126)	(0.140)	(0.085)	(0.108)
Constant	0.533***	0.495***	0.081***	0.023
	(0.042)	(0.047)	(0.029)	(0.036)
Harm type FE	N	N	N	N
Observations	286	286	286	286
R^2	0.130	0.037	0.080	0.294
Note:			*p<0.1; **p<0.05; ***p<0.01	

Panel B: Harm-type Fixed Effects

	Dependent variable: Litigation			
	Any	Civil	Criminal	Securities
	(1)	(2)	(3)	(4)
Post *Concepcion*	0.014	0.043	-0.076**	0.073*
	(0.050)	(0.056)	(0.036)	(0.044)
Shareholders harmed	0.027	-0.134	0.066	0.204***
	(0.083)	(0.093)	(0.060)	(0.072)
Government harmed	-0.329*	-0.463**	0.259*	0.032
	(0.194)	(0.217)	(0.139)	(0.168)
Harm type FE	N	N	N	N
Observations	286	286	286	286
R^2	0.228	0.136	0.088	0.360
Note:			*p<0.1; **p<0.05; ***p<0.01	

Appendix Table A.2: Robustness—Intensive Margin and Arbitration

This table shows how enforcement varies by harmed party and harm type. The analysis mirrors that in the main text but includes an indicator for whether the harm occurred after AT&T Mobility LLC v. Concepcion, which greatly eased the use of out-of-court arbitration. The sample is constructed from the Good Jobs First dataset. The analysis conditions on there being a civil case and examines whether there is a criminal case in Panel A, an individual defendant in Panel B, and whether an individual is sent to prison in Panel C. The outcome variable is a zero-one indicator in each panel. *Post Concepcion* is a 0-1 indicator for whether the harm occurred after 2010, the year in which *Concepcion* was decided. *Shareholders harmed* and *government harmed* is a 0-1 indicator for whether shareholders or the government suffered a financial loss or other loss to their interests. *Injury or death* is a 0-1 indicator for whether there was resulting injury or death from the harm. . The omitted category is therefore other stakeholders suffering death, injury, or financial loss, captured by the constant term. Columns (3) and (4) in each panel include harm type (e.g., drug/medical, food safety, accounting fraud, etc.) fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Is there a criminal case?

	Dependent variable:			
	Criminal case			
	(1)	(2)	(3)	(4)
Post *Concepcion*	-0.031**	-0.029*	-0.041***	-0.041***
	(0.015)	(0.015)	(0.015)	(0.015)
Shareholders harmed	-0.006	-0.0001	0.009	0.009
	(0.025)	(0.026)	(0.032)	(0.032)
Government harmed	0.069***	0.075***	0.059***	0.058***
	(0.016)	(0.016)	(0.017)	(0.017)
Injury or death		0.053**		-0.016
		(0.025)		(0.027)
Constant	0.089***	0.080***		
	(0.012)	(0.013)		
Harm Type FE	N	N	Y	Y
Observations	1,522	1,522	1,522	1,522
R^2	0.016	0.019	0.225	0.225

Note: *p<0.1; **p<0.05; ***p<0.01

Panel B: Is there an individual defendant?

	Dependent variable:			
	Individual defendant			
	(1)	(2)	(3)	(4)
Post *Concepcion*	0.021	0.020	0.003	0.003
	(0.017)	(0.017)	(0.017)	(0.017)
Shareholders harmed	0.457***	0.452***	0.065*	0.065*
	(0.029)	(0.029)	(0.038)	(0.038)
Government harmed	-0.032*	-0.037*	0.019	0.018
	(0.019)	(0.019)	(0.020)	(0.020)
Injury or death		-0.040		-0.052*
		(0.029)		(0.031)
Constant	0.112***	0.118***		
	(0.014)	(0.015)		
Harm Type FE	N	N	Y	Y
Observations	1,522	1,522	1,522	1,522
R^2	0.144	0.145	0.291	0.292

Note: *p<0.1; **p<0.05; ***p<0.01

Panel C: Does an individual go to prison?

	Dependent variable:			
	Individual to prison			
	(1)	(2)	(3)	(4)
Post *Concepcion*	-0.001	-0.001	-0.008	-0.008
	(0.007)	(0.007)	(0.008)	(0.008)
Shareholders harmed	0.024**	0.025**	0.026	0.026
	(0.012)	(0.012)	(0.017)	(0.017)
Government harmed	0.006	0.006	0.015*	0.015*
	(0.008)	(0.008)	(0.009)	(0.009)
Injury or death		0.004		-0.009
		(0.012)		(0.014)
Constant	0.016***	0.016***		
	(0.006)	(0.006)		
Harm Type FE	N	N	Y	Y
Observations	1,522	1,522	1,522	1,522
R^2	0.003	0.003	0.031	0.032

Note: *p<0.1; **p<0.05; ***p<0.01