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The Cost of Doing Business: Corporate Crime and Punishment Post-Crisis


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The Cost of Doing Business: Corporate Crime and Punishment Post-Crisis

Dorothy S. Lund* & Natasha Sarin**

Abstract

For many years, law and economics scholars, as well as politicians and regulators, have debated whether corporate criminal enforcement overdeters beneficial corporate activity or in the alternative, lets corporate criminals off too easily. This debate has recently expanded in its polarization: On the one hand, academics, judges, and politicians have excoriated the DOJ for failing to send guilty bankers to jail in the wake of the financial crisis; on the other, the DOJ has since relaxed policies aimed to secure individual liability and reduced the size of fines and number of prosecutions.

A crucial and yet understudied piece of evidence in this conversation is how crime has responded to our enforcement regime. In the last few decades, the DOJ has embraced many law and economics enforcement tenets including entity liability over individual liability, fewer prosecutions and a greater number of settlements, and high fines over jail time. And several papers have documented these enforcement trends in detail. However, unlike every other type of crime, the government does not collect data about corporate crime levels. Therefore, we cannot tell how corporations are responding to these enforcement practices.

In this paper, we take important first steps in determining how corporate crime, and financial institution crime in particular, is responding to the DOJ's enforcement regime and its shifting priorities. Specifically, we proxy for financial crime using three novel sources: the Financial Crimes Enforcement Network (FinCEN) Suspicious Activity Reports (SARs), consumer complaints made to the Consumer Financial Protection Bureau (CFPB), and whistleblower complaints made to the Securities and Exchange Commission (SEC). Each source reveals a steep increase in complaints or reports indicative of financial institution misconduct. We also examine levels of public company recidivism, which are also on the rise. And we document a potential cause: recidivist companies are much larger than non-recidivist companies, but they receive *smaller* fines than non-recidivist companies (measured as a percentage of assets and revenue). In theory, high fines can supply adequate deterrence by themselves, but our results indicate that it might not be politically feasible to levy a sufficiently high fine to deter future incidents of corporate crime. Put differently, for large companies, criminal penalties may be just another cost of doing business—and quite a reasonable cost at that. We conclude by offering recommendations for enforcement agencies and policymakers. In particular, we observe that many of the assumptions inherent to classical law and economics theory are inaccurate with respect to white-collar crime. Fines large enough to deter malfeasance are large and potentially infinite—well outside the possibility set for policymakers. The DOJ should therefore consider other ways of securing deterrence, such as by increasing penalties against guilty individuals.

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The Cost of Doing Business: Corporate Crime and Punishment Post-Crisis

I. Introduction

In 2016, California utility company PG&E was convicted of multiple felony violations, after a five-and-a-half-week jury trial.¹ Six years earlier, a PG&E gas pipeline had exploded, flattening a neighborhood in San Bruno, California and killing eight people.² The prosecution presented evidence that, before the accident, the utility company failed to address and investigate threats to its pipelines and never took action to correct problems once they had been identified. The company allegedly also violated federal safety regulations and misled regulators who investigated the accident. PG&E was ultimately fined \$3 million—the maximum statutory penalty—and given five years “probation,” which subjected the company to a corporate monitor and required it to pay for advertising publicizing its criminal conduct and engage in community service.³ In accordance with its usual practice, the DOJ did not charge any individuals.

The DOJ celebrated the sentence as a major victory. A U.S. Attorney announced: “While the conviction and sentence in this case will not bring back those who were lost ... it does take necessary steps toward ensuring PG&E *will never again engage in this type of criminal behavior* that puts all of its customers at substantial risk.”⁴

The celebratory sentiment was short lived. Less than two years later, PG&E power lines caused the deadliest wildfire in California history, killing eighty-six people and destroying an entire town.⁵ PG&E has since disclosed that it had inspected the towers involved shortly before the fire, suggesting that the company was aware of problems with the lines.⁶ A grand jury has been empaneled, and, according to the California Attorney General’s office, the company may face criminal charges once again.⁷ PG&E has already sought bankruptcy protection as a result of an estimated \$30 billion in liabilities related to the wildfire.⁸

This is not an isolated example. In the financial sector alone, last year brought successful enforcement actions against Wells Fargo for fake accounts,⁹ the Royal Bank of Scotland for its

¹ Press Release, U.S. Dep’t of Justice, PG&E Ordered to Develop Compliance and Ethics Program as Part of Its Sentence for Engaging in Criminal Conduct (Jan. 26, 2017) [hereinafter PG&E Press Release], <https://www.justice.gov/usao-ndca/pr/pge-ordered-develop-compliance-and-ethics-program-part-its-sentence-engaging-criminal>.

² Michael Hiltzik, *How the Criminal Conviction of PG&E Lets the Real Wrongdoers Go Free*, L.A. TIMES (Aug. 10, 2016, 12:20 PM), <https://www.latimes.com/business/hiltzik/la-fi-hiltzik-pge-criminal-20160810-snap-story.html>.

³ PG&E Press Release, *supra* note 1.

⁴ *Id.* (emphasis added).

⁵ Russell Gold, *PG&E Power Line that Sparked Camp Fire Was Inspected Weeks Earlier*, WALL ST. J. (Aug. 22, 2019, 5:30 AM), <https://www.wsj.com/articles/pg-e-power-line-that-sparked-camp-fire-was-inspected-weeks-earlier-11566466203>.

⁶ Mark Chediak & Pamela A. Maclean, *PG&E May Face Criminal Charges After Probe of Deadly Wildfires*, BLOOMBERG NEWS (June 9, 2018, 5:01 AM), <https://www.bloomberg.com/news/articles/2018-06-09/pg-e-may-face-criminal-charges-after-probe-of-deadly-wildfires> (describing evidence that California knew about violations of law by PG&E in connection with the fires).

⁷ *Id.*

⁸ *Id.*

⁹ Lucinda Shen, *Wells Fargo Just Got Hit with Another Penalty for the Financial Crisis. This Time, It’s \$2.1 Billion*, FORTUNE (Aug. 1, 2018), <https://fortune.com/2018/08/01/wells-fargo-financial-crisis-fine-mortgage-backed-security/>.

sales of risky assets leading up to the financial crisis,¹⁰ Barclays for its attempt to unmask a whistleblower,¹¹ HSBC for money laundering,¹² Société Générale for sanctions violations,¹³ and more. And the growing uneasiness about corporate malfeasance has prompted calls for action. Notably, Senator Elizabeth Warren has introduced a bill that would authorize prosecution of an executive officer of any corporation that generates more than \$1 billion in annual revenue for negligently permitting or failing to prevent a criminal or civil violation by the company.¹⁴

This bill, if passed, would allow for a drastic change in enforcement practice. The PG&E criminal trial is representative of the current corporate criminal enforcement regime in two main ways: first, individuals are very rarely charged, and second, the main disciplinary mechanism is the imposition of a hefty fine.¹⁵ Indeed, the unique aspect of the PG&E trial is that it made it as far as it did: today, the vast majority of criminal suits against corporations are settled early on, using deferred prosecution agreements (“DPAs”) or non-prosecution agreements (“NPAs”).¹⁶ The trend toward higher fines, fewer trials, and no individual charges has been underway for some time, and has accelerated in the past few years.¹⁷ Today, corporate enforcement activity is lower than it has been in decades.¹⁸

In theory, the DOJ’s enforcement regime could be operating optimally, even at reduced levels. The principal aim of a corporate criminal liability is deterrence—other goals, such as retribution or incapacitation, make less sense when the subject of the penalty is a legal entity. And law and economics scholars have been influential in theorizing how to efficiently deter corporate misconduct. Importantly, the optimal amount of corporate crime is unlikely to be zero:¹⁹ eliminating all corporate crime would be very expensive, and the benefit would likely be dwarfed

¹⁰ Julia Kollewe, *RBS Settles US Department of Justice Investigation with \$4.9bn Fine*, THE GUARDIAN (May 10, 2018, 2:57 AM), <https://www.theguardian.com/business/2018/may/10/rbs-settles-us-department-of-justice-investigation-with-49bn-fine>.

¹¹ Kalyeena Makortoff, *Barclays Hit with \$15m Fine Over Attempts to Unmask Whistleblower*, THE GUARDIAN (Dec. 18, 2018, 2:25 PM), <https://www.theguardian.com/business/2018/dec/18/barclays-hit-with-15m-fine-over-attempts-to-unmask-whistleblower>.

¹² Aruna Viswanatha & Brett Wolf, *HSBC to Pay \$1.9 Billion U.S. Fine in Money-Laundering Case*, REUTERS (Dec. 10, 2012, 9:45 PM), <https://www.reuters.com/article/us-hsbc-probe/hsbc-to-pay-1-9-billion-u-s-fine-in-money-laundering-case-idUSBRE8BA05M20121211>.

¹³ Katanga Johnson et al., *Societe Generale to Pay \$1.4 Billion to Settle Cases in the U.S.*, REUTERS (Nov. 19, 2018, 9:35 AM), <https://www.reuters.com/article/us-usa-fed-socgen/societe-generale-to-pay-1-4-billion-to-settle-cases-in-the-u-s-idUSKCN1NO26B>.

¹⁴ Robert Anello, *Employee Liability for Corporate Misconduct--Elizabeth Warren Style: Can Negligence Become Criminal?*, FORBES (Sep. 18, 2019, 6:01 PM), <https://www.forbes.com/sites/insider/2019/09/18/employee-liability-for-corporate-misconduct-elizabeth-warren-style-can-negligence-become-criminal/#3a1605da67f1>.

¹⁵ See Brandon L. Garrett, *Declining Corporate Prosecutions*, 57 AM. CRIM. L. REV. (forthcoming) (manuscript at 2-3) (available at: <https://ssrn.com/abstract=3360456>) [hereinafter Garrett, *Declining Corporate Prosecutions*].

¹⁶ *Id.* (manuscript at 14-15); see also Jennifer Arlen & Marcel Kahan, *Corporate Governance Regulation Through Nonprosecution*, 84 U. CHI. L. REV. 323, 327 (2017).

¹⁷ See Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 21).

¹⁸ Joseph F. Savage, Jr. & Marielle Sanchez, *Carrot Replaces Stick: Corporate Crime Enforcement in the Trump Administration*, L.J. NEWSL. (May 2019), <http://www.lawjournalnewsletters.com/2019/05/01/carrot-replaces-stick-corporate-crime-enforcement-in-the-trump-administration/?slreturn=20190907124101>.

¹⁹ See Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 170 (1968) (stating that the optimal penalty should adjust to reflect the “cost of catching and convicting offenders, the nature of punishments - for example, whether they are fines or prison terms - and the responses of offenders to changes in enforcement.”).

by the cost.²⁰ Therefore, an optimal enforcement regime would weigh the public and private costs of enforcement and compare that cost with the social benefit of deterring additional crime. Put another way, optimal deterrence occurs when the penalty imposed equals the social cost of crime (adjusted upward for the probability that the crime will go undetected).²¹ Law and economics theory also suggests that deterring corporate malfeasance with financial penalties is preferable to charging individuals for several reasons. In particular, it is cheaper for the government to collect a fine than to send a person to prison; not only that, pursuing individuals could lead to suboptimal levels of employee risk aversion.²²

The problem, though, with embracing a law and economics approach to enforcement is that fines are not actually calibrated as theory would advise.²³ Fines are instead calculated based on a pre-determined range contained in the U.S. Sentencing Guidelines.²⁴ Attempting to estimate the social cost of crime would likely be impossible.²⁵ But without being able to calculate what is optimal, we have no idea whether fines are being set to deter crime in the way that these theoretical models would prescribe.²⁶

The inability to calculate optimal fines might not matter as much if we could study trends in corporate activity over time, and calibrate fines and penalties based on that information. However, unlike every other type of criminal crime, there is no effort by the government to estimate corporate crime levels.²⁷ Thanks to Brandon Garrett, we have excellent data about corporate crime enforcement against public companies: the number of prosecutions, convictions, and settlements,

²⁰ See Christopher Carrigan & Cary Coglianese, *Oversight in Hindsight: Assessing the U.S. Regulatory System in the Wake of Calamity*, in REGULATORY BREAKDOWN: THE CRISIS OF CONFIDENCE IN U.S. REGULATION 10 (Cary Coglianese ed., 2012) (“the complete elimination of all harms... is not possible without stopping altogether the very activities that give rise to these harmful events”).

²¹ Daniel R. Fischel & Alan O. Sykes, *Corporate Crime*, 25 J. LEGAL STUD. 319, 324 (1996).

²² See *infra* notes 57-59, 70-72 and accompanying text.

²³ See U.S. SENTENCING GUIDELINES MANUAL ch. 8, pt. C (U.S. SENTENCING COMM’N 2015) [hereinafter SENTENCING GUIDELINES]; see also Jennifer Arlen, *Corporate Criminal Liability: Theory and Evidence*, in RESEARCH HANDBOOK ON THE ECONOMICS OF CRIMINAL LAW 144, 145 (Alon Harel and Keith N. Hylton, eds., Edward Elgar Publishing, 2012) [hereinafter Arlen, *Corporate Criminal Liability*], http://www.ioea.eu/pdf/textes_2012/LEC-Arlen_Chapter-7.pdf.

²⁴ SENTENCING GUIDELINES, *supra* note 23, ch. 8, pt. C. The size of the penalty can be adjusted upward for culpability factors, such as hindering the investigation, and adjusted downward if the organization has an effective compliance program. *Id.*

²⁵ Cf. William J. Baumol & Wallace E. Oates, *The Use of Standards and Prices for Protection of the Environment*, 73 SWED. J. OF ECON. 42 (1971).

²⁶ Fischel and Sykes recognize that “sanctions uncalibrated to the level of harm can have quite a pernicious effect when the target of the sanction is a corporation.” Fischel & Sykes, *supra* note 21, at 323. But they claim that this cautions against large sanctions that would overdeter beneficial activity. *Id.*

²⁷ White Collar Crime Publications, BUREAU OF JUSTICE STATISTICS, <https://www.bjs.gov/index.cfm?ty=tp&tid=33> (last visited Jan. 3, 2020) [hereinafter BJS White Collar Reports] (showing that while other types of crime were studied more recently, the last estimate of white collar crime occurred in 1983, see DONALD A. MANSON, BUREAU OF JUSTICE STATISTICS, TRACKING OFFENDERS: WHITE COLLAR CRIMES (1983), <https://www.bjs.gov/content/pub/pdf/to-wcc.pdf>); see also CINDY R. ALEXANDER & MARK A. COHEN, GEORGE MASON UNIV. SCH. OF LAW: LAW & ECON. CTR., TRENDS IN THE USE OF NON-PROSECUTION, DEFERRED PROSECUTION, AND PLEA AGREEMENTS IN THE SETTLEMENT OF ALLEGED CORPORATE CRIMINAL WRONGDOING (2015) [hereinafter ALEXANDER, TRENDS IN THE USE OF NON-PROSECUTION], https://masonlec.org/site/rte_uploads/files/Full%20Report%20-%20SCJI%20NPA-DPA%2C%20April%202015%281%29.pdf.

and the amount of fines levied.²⁸ It is therefore possible to accurately describe the DOJ's enforcement practices and its shifting priorities. It is not possible to determine whether that regime is adequately deterring corporate crime.

Pause for a moment to imagine if the same were true for other types of crime. Suppose that the police in your city took no steps to measure and quantify the number of robberies each year. As such, if there was a steady increase in robberies, the police (and the government agencies with authority over the police) would not know about it, nor would they be able to respond. In reality, government bodies take great pains to measure the level of violent crime in their jurisdiction, as it helps them calibrate whether or not additional steps need to be taken to increase deterrence: increased monitoring of vulnerable areas, a quicker response time when calls are received, stronger charges in cases against arrestees.²⁹ But for corporate crime—which can affect millions of people's lives, and bring down entire economies—enforcement plows forward blindly, subject to political winds and faith in the law and economics models discussed above, rather than taking a clear look at whether crime is being adequately deterred.³⁰

In this Article, we take important first steps toward answering the question of whether corporate crime is on the rise. Our focus is on corporate crime committed by employees of large financial firms.³¹ We focus on financial institution misconduct because of its importance, and because of the heated debate over the government's response to crime committed by banks in the wake of the 2008 financial crisis.³² An unexplored and yet critically important aspect of this conversation is whether crime by financial institutions has risen or fallen in the years after the financial crisis. How else can we determine whether the government's response was adequate?

²⁸ Brandon L. Garrett & Jon Ashley, *Duke and UVA Corporate Prosecution Registry* [hereinafter Garrett, *Corporate Prosecution Registry*], <http://lib.law.virginia.edu/Garrett/corporate-prosecution-registry/index.html> (last updated Aug. 16, 2019).

²⁹ One exception is data about gun violence, which, as a result of industry lobbying, has been quite limited since 1996. Samantha Raphelson, *How The NRA Worked To Stifle Gun Violence Research*, NPR (Apr. 5, 2018, 3:01 PM), <https://www.npr.org/2018/04/05/599773911/how-the-nra-worked-to-stifle-gun-violence-research>.

³⁰ ALEXANDER, TRENDS IN THE USE OF NON-PROSECUTION, *supra* note 27, at 28 (“In comparison with street crime, where victimization rates can be tracked over time through victim surveys and by crimes reported to police, there is relatively little documentation of the harm from corporate crime or its victims or frequency of occurrence.”).

³¹ Note that perceptions of the blameworthiness of firms whose agents commit crime may be affected by industry characteristics. We opened this Article by discussing negligence by PG&E, a utilities company whose aging, under-serviced equipment sparked deadly fires. *See supra* notes 1-8 and accompanying text. Utilities are heavily regulated, and some identify this characteristic as contributing to PG&E's failures. For example, regulators refused for nearly a decade to allow the utility to raise prices to recoup cost increases. Gold, *supra* note 5. In theory, additional profits could have helped the utility address its known weaknesses. *Id.* There is at least a question of whether it is appropriate to think of a heavily regulated utility facing pricing constraints as more of a government subsidiary than a typical corporation. By contrast, the case for the blameworthiness of a typical corporation whose agents commit crime is stronger. Corporations are often able to collect large (and to many, excessive) rents, meaning that the entity is not constrained from taking steps to eliminate harmful behavior. Indeed, a corporation's business model often privileges shareholder wealth over social welfare; therefore, there is a justice-based argument supporting the imposition of criminal liability on the entity (and ultimately the shareholders) whenever criminal behavior, or the failure to prevent it, benefits shareholders but creates social harm. *See* Elizabeth Warren & Oren Bar-Gill, *Making Credit Safer*, 157 U. PENN. L. REV. 1 (2008).

³² *See supra* notes 9-14.

We look for proxies for misconduct by financial institutions in an attempt to shed light on whether our enforcement regime is adequately deterring financial crime. To proxy for financial crime, we utilize three novel sources: the Financial Crimes Enforcement Network (FinCEN) Suspicious Activity Reports (SARs), consumer complaints made to the Consumer Financial Protection Bureau (CFPB), and whistleblower complaints made to the Securities and Exchange Commission (SEC).³³ SAR reports are required to be filed by financial institutions under certain circumstances that are highly suggestive of malfeasance, while the CFPB data are generated by aggravated consumers of financial products.³⁴ Whistleblower complaints are generally filed by employees of banks and companies who suspect that financial crime has occurred; if the information leads to a successful enforcement action, the whistleblower is eligible for a large bounty.³⁵

Our results are summarized as follows: in the period from 2012 to 2019, we document a steep upward trend in SARs filed across every single agency that collects them: the OCC, the FDIC, the FHIFA, the NCUA, the FRB, the IRS, and the SEC. This means that financial institutions flagged a greater number of transactions suggestive of money laundering, fraud, or other financial crimes in each year for the past five years.³⁶ In addition, we document a steep upward trend in consumer complaints about financial misconduct submitted to the CFPB from November 2014 to August 2019. Finally, we also observe a steady increase in whistleblower tips submitted to the SEC from 2011 to 2018. In sum, our data suggest a steep increase in reports of financial misconduct in three unrelated places.

For too long, academics have shied away from an inquiry like ours because of the substantial limitations of the data that are available and the difficulty of the project. It is challenging to try and isolate the level of reported crime from the enforcement regime. Our inquiry is thus novel—though not without imperfections. Changes over time that impact the incidence of financial misconduct

³³ We are not the first to try an extrapolate levels of financial misconduct from sources other than enforcement data. Indeed, an extensive literature attempts to measure the causes of financial misconduct from three popular databases: accounting restatements, securities class action lawsuits, and accounting and auditing enforcement releases. *See, e.g.,* Jonathan M. Karpoff et al., *Proxies and Databases in Financial Misconduct Research*, 92 ACCT. REV. 141-163 (2017) (describing these databases). We decided to study different datasets for several reasons. For one, we in many ways prefer our datasets because they allow us to study the time trend of post-crisis financial institution misconduct across several dimensions beyond securities and accounting fraud. In addition, the accounting restatement are also known to be incomplete and misleading. *See id.* at 142. Of course, any data exercise on these questions is imperfect—including the analysis contained in our article, which is why our claims are ultimately quite limited. For example, we do not claim to measure actual crime levels, but instead document trends that suggest a rise in financial institution crime over time. *Cf.* Alexander Dyck, Adair Morse & Luigi Zingales, *How Pervasive is Corporate Fraud?* (Rotman Sch. of Mgmt., Working Paper No. 2222608, 2013), <https://ssrn.com/abstract=2222608>. And we hope a contribution of this piece is to encourage the collection of more granular data on instances of corporate criminality.

³⁴ *See* Consumer Complaint Database, CONSUMER FIN. PROT. BUREAU, <https://www.consumerfinance.gov/data-research/consumer-complaints/> (last updated Jan. 1, 2020); Suspicious Activity Report Statistics Database, FIN. CRIMES ENF'T NETWORK, <https://www.fincen.gov/reports/sar-stats> (last updated Nov. 30, 2019).

³⁵ *See* SEC, WHISTLEBLOWER PROGRAM 6 (2019), <https://www.sec.gov/files/sec-2019-annual-report-whistleblower-program.pdf> (“Awards must be made in an amount that is 10 percent or more and 30 percent or less of the monetary sanctions collected.”).

³⁶ SAR data comprises both business-related and individual suspicious activity. To proxy for corporate crime, we isolate SARs referencing institutional insiders (employees, directors, agents, officers, and controlling shareholders). *See* discussion *infra* Part IIIA.

reporting can confound our results. For example, it is possible that following the financial crisis, institutions became more careful about reporting suspicious activity, and therefore SAR filings increased for that reason. Likewise, perhaps whistleblower tips increased not because of an increase in criminality, but because of increased recognition of the large bounties available. And finally, perhaps consumers of financial products were simply becoming familiar with a new tool provided by a new agency, and that fact explains the increase in complaints made to the CFPB. Regarding the latter concern, however, we document a *decrease* in consumer complaints related to mortgages after July 2016; all other complaint types increase. This fall in mortgage complaints is consistent with increased scrutiny from the federal government about mortgage practices in the years following the financial crisis, as new regulations and regulatory oversight helped eliminate abusive practices.³⁷ Although this is not the only plausible explanation—it could be attributable to a fall in mortgage delinquencies, for example³⁸—we think that it suggests that the increase in other types of complaints is not solely attributable to an increase in consumer familiarity with the consumer complaint resource. If that were the sole cause, we would expect to see an increase in complaints across all dimensions.

In general, the volatility in our data series suggests that we are picking up on something more than changes in reporting and enforcement. Taken together, our data shows that corporate crime levels rise post-crisis, but in a non-monotonic way. It is certainly possible that this volatility is a byproduct of changes in enforcement priorities, but we believe that at least a portion of the uptick we document reflects an increase in the underlying level of criminal behavior. And given the features of the federal enforcement regime that we observe—the disappearance of individual liability for guilty bankers, the low number of prosecutions against financial institutions—our results are unlikely to strike many as surprising.

We recognize, however, that the most that we can say about these data is that they are consistent with a theory that financial crime is on the rise. To speak to the question of whether the federal enforcement regime is supplying adequate deterrence for all types of crime, we also examine levels of public company recidivism, relying on data provided by Brandon Garrett. We define a corporate recidivist to be a public company that is prosecuted more than once between 2001-2018. We normalize fines by three measures of firm size—assets, revenue, and headcount. And we document a steep rise in recidivism—i.e., the number of firms that are prosecuted more than once—during this time period, across companies in all industries.³⁹

We also observe some interesting characteristics of recidivist firm penalties. The average size of the first penalty imposed on a recidivist firm is large—about twice as high as the average size of the penalty for non-recidivist firms. However, when measured as a percentage of the firm’s assets or revenue, the first penalty is much smaller—about forty times smaller. In other words, larger companies tend to be recidivists, and bear a much smaller fine relative to smaller non-recidivist

³⁷ See ANDREAS FUSTER ET AL., FED. RESERVE BANK OF N.Y., STAFF REPORT NO. 857: DOES CFPB OVERSIGHT CRIMP CREDIT? (2018), https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr857.pdf.

³⁸ See Mortgage Delinquency Rate Trends, CONSUMER FIN. PROT. BUREAU, <https://www.consumerfinance.gov/data-research/mortgage-performance-trends/mortgages-90-or-more-days-delinquent/>.

³⁹ This is not driven by the fact that the time horizon grows as years pass, e.g. a firm committing a crime in 2002 has only one year of prior criminal history, versus a firm in 2018 has 17 years. In fact, in the immediate aftermath of the crisis, the share of crimes committed by a recidivist jumps from 7% in 2010 (averaging around 10 percent in the decade prior) to 28% in 2011 (averaging over 30 percent in the decade that follows). See *infra* Figure 11.

institutions: these fines are closer to “parking tickets”⁴⁰ than meaningful deterrents.⁴¹ For smaller firms, fines represent a larger burden.⁴² This may explain why their deterrent value (as measured by the likelihood of offending again) is higher than the lower fees ascribed to their larger counterparts. Perversely, concern about the potential adverse effects of criminal prosecution on large firms and the ramifications for the broader economy may insulate malfeasance that is most socially disruptive from liability.⁴³

In sum, our data indicate that financial misconduct is on the rise. We also document an increase in corporate recidivism across all types of crime. And we suspect that the current U.S. financial enforcement regime is to blame.⁴⁴ Although high fines imposed sporadically could result in efficient and adequate deterrence,⁴⁵ our results indicate that fines are too low or too sporadic to effectively deter crime.⁴⁶ We posit that the law and economics scholars who championed entity-level liability and large financial penalties as the most efficient means of securing deterrence neglected the practical realities of enforcement: in theory, a large fine will cause the people at the

⁴⁰ Becker, *supra* note 19.

⁴¹ See PETER C. YEAGER, CORPORATE CRIME 124-25 (1980) (“The \$437,500 fine imposed against General Electric in the electrical equipment conspiracy was said to be the equivalent of a parking fine for many citizens....Chevron paid \$1 million fine in 1972 for violation of offshore antipollution laws...the fine was about .03 percent of the company’s gross income (about the same as a \$10 traffic ticket for a person making \$25,000 a year).”). Of course, another explanation is possible—perhaps larger companies are more likely to be pursued by the government. We observe, however, that recidivists are not more likely to have a corporate monitor or audit requirement imposed by the government in the first enforcement action. This indicates that our results are not explained by the ease of prosecution, although it does not rule out the hypothesis that enforcement agencies prefer to target larger companies for multiple rounds of enforcement actions.

⁴² Note that this is the opposite of the approach taken by countries in Scandinavia, which scale up fines for certain crimes based on the offender’s income. See Joe Pinsker, *Finland, Home of the \$103,000 Speeding Ticket*, THE ATLANTIC (Mar. 12, 2015), <https://www.theatlantic.com/business/archive/2015/03/finland-home-of-the-103000-speeding-ticket/387484/>.

⁴³ See, e.g., Eric Holder, U.S. Att’y Gen., Remarks Before the Senate Judiciary Committee (Mar. 6, 2013) (transcript available at: http://www.americanbanker.com/issues/178_45/transcript-attorney-general-eric-holder-ontoo-big-to-jail-1057295-1.html) (“acknowledg[ing] that decades of deregulation and mergers had left the U.S. economy heavily consolidated” and that it was therefore “difficult to prosecute the major banks, because indictments could have a negative impact on the national economy, perhaps even the world economy.”).

⁴⁴ Financial institutions in the United States are heavily regulated, and their regulatory burden increased in the aftermath of the Great Recession. This scrutiny restricts entry into financial markets, when in many cases new institutions must receive authorization before even beginning to serve consumers; to their day-to-day operations, which are scrutinized by a labyrinth of distinct regulatory bodies who force adjustments to institutions’ capital structure in response to their individual health as well as overall market conditions. Despite the substantial increase in regulation in the financial series broadly; the regulation of financial misconduct, facilitated by the criminal justice system, has not been similarly overhauled. See, e.g., CARLOS M. PELÁEZ, ET AL., FINANCIAL REGULATION AFTER THE GLOBAL RECESSION (Springer, 2009).

⁴⁵ See Richard A. Posner, *An Economic Theory of Criminal Law*, 85 COLUM. L. REV. 1193, 1206 (1985) [hereinafter Posner, *An Economic Theory of Criminal Law*] (“If the costs of collecting fines are assumed to be zero regardless of the size of the fine, the most efficient combination is a probability arbitrarily close to zero and a fine arbitrarily close to infinity.”).

⁴⁶ We are aligned with Judge Rakoff, who makes the point forcefully and repeatedly that fines levied against large financial institutions insufficiently deter their breaking the law. See Jed S. Rakoff, *Justice Deferred Is Justice Denied*, N.Y. REV. BOOKS (Feb. 19, 2015) [hereinafter Rakoff, *Justice Denied*], <https://www.nybooks.com/articles/2015/02/19/justice-deferred-justice-denied/>; Jed S. Rakoff, *The Financial Crisis: Why Have No High-Level Executives Been Prosecuted?*, N.Y. REV. BOOKS (Jan. 9, 2014) [hereinafter Rakoff, *Why Have No High-Level Executives Been Prosecuted?*], <http://www.nybooks.com/articles/2014/01/09/financial-crisis-why-no-executive-prosecutions/>.

top to take steps to prevent future instances of harm across the entity. But the size of the fine necessary to lead to adequate deterrence might not be possible to calculate (What is the social cost of eighty-six lives?) or politically feasible. (What if the optimal fine puts the firm into bankruptcy?⁴⁷ What if the optimal fine for a large company is many billions of dollars?)

Not only that, there are practical limitations to the corporation's ability to adequately deter future incidents of crime.⁴⁸ That is because there is a disconnect between the recipient of the punishment and the bad actor when the only punishment is an entity-level fine. Quite obviously, an entity-level fine primarily affects shareholders, not necessarily the individuals who committed the crime. In theory, shareholders should have an incentive to take steps aimed at deterring future bad activity, but rationally apathetic shareholders might not recognize the problem nor understand how to address it. In addition, the ultimate deterrent effect of fines against corporations and their shareholders may be muted by several factors. For example, although a company's stock price falls after the imposition of the penalty, it usually bounces back very quickly.⁴⁹ Shareholders might not demand an appropriate reduction in activity levels, nor the right amount of firm-wide monitoring, to avoid future instances of crime.⁵⁰

In sum, we theorize that an over-reliance on entity-level fines is likely inadequate from a deterrence perspective. Even though the average fine is higher today than ever before, fines are still too low to make up for uneven enforcement. The optimal entity-level penalty is likely to be very large and potentially infinite—well outside the possibility set of those negotiating these settlements. Even if enforcers could levy the optimal fine, the effect would be muted—dispersed shareholders would bear the brunt of the harm, but collective action problems limit their ability to take action to discipline wayward management. In other words, the managers who agree to pay fines out of shareholders' pockets might not bear any consequences.⁵¹

Our article therefore makes two primary contributions. First, we proxy for financial crime using three novel data sources with the goal of assessing whether criminal enforcement is adequately deterring financial crime. Importantly, we are the only paper to look beyond enforcement data—which is subject to endogeneity concerns—when evaluating criminal

⁴⁷ See Larry Summers, *Companies on Trial: Are They 'Too Big to Jail'?*, FINANCIAL TIMES (Nov. 21, 2014), <https://www.ft.com/content/e3bf9954-7009-11e4-90af-00144feabdc0> (noting the collateral consequences that occur when corporations are punished, including harm to innocent employees and shareholders, and observing that these consequences have affected enforcement policy).

⁴⁸ Shavell and Polinsky provide the classic view, that “if firms are made strictly liable for their harms, they will design rewards and punishments for their employees that will lead employees to reduce the risk of harm, since firms will want to reduce their liability payments.” A. Mitchell Polinsky & Steven Shavell, *Should Employees be Subject to Fines and Imprisonment Given the Existence of Corporate Liability?*, 13 INT'L J.L. & ECON. 239, 241 (1993) [hereinafter Polinsky & Shavell, *Should Employees be Subject to Fines?*].

⁴⁹ Matthews, others.

⁵⁰ See Jennifer Arlen & Reinier Kraakman, *Controlling Corporate Misconduct: An Analysis of Corporate Liability Regimes*, 72 N.Y.U. L. REV. 687 (1997).

⁵¹ See Summers, *supra* note 47 (“The current trend towards large fines as the response to corporate wrongdoing seems to promote a somewhat unattractive combination of individual incentives. Managers do not find it personally costly to part with even billions of dollars of their shareholders' money, especially when fines represent only a small fraction of total market value. Paying with shareholders' money as the price of protecting themselves is a very attractive trade-off. Enforcement authorities like to either collect large fines or be seen as delivering compensation for those who have been victimised by corporate wrongdoing. So they are all too happy to go along.”).

enforcement. And we generate several pieces of evidence indicating that enforcement is not adequately deterring financial crime. Second, we identify serious flaws in the law and economics theory that enforcement agencies have embraced, as well as its practical administration, that could contribute to underdeterrence.

We recognize, however, that our data do not allow us to precisely identify the aspects of our enforcement regime that are failing us, nor the appropriate course of action to correct it. Therefore, our principal policy recommendation is for the government to abandon law and economics theory as a guide. We postulate that the deterrence value of individual penalties for corporate malfeasance is likely significantly larger than entity-level liability that theory recommends—and the current enforcement regime adopts. This is ultimately an empirical question, and so we urge government to adopt a data-driven approach to enforcement. With better data, government policymakers would be better able to understand how to calibrate enforcement to deter corporate misconduct. For example, most enforcement actions are brought against small, closely held companies (which, unfortunately, are beyond the scope of the enforcement dataset collected by Brandon Garrett).⁵² Perhaps this is because small companies are more likely to commit crimes; or, they could be equally or even less likely to commit crimes, and yet agencies target them because small companies are easier to prosecute or because there are more of them. (To continue the analogy from above, if the government only arrests and prosecutes small-time criminals, crime in other areas will not be effectively deterred). If we could observe that crime has been increasing among large companies in the wake of shift in enforcement, we would be able to offer a tailored recommendation—enforcement agencies should focus attention on prosecuting crime at larger companies, either by increasing the number of prosecutions, levying higher penalties, or by targeting guilty individuals. And if enforcement agencies moved in this direction, we could then study the effect on crime levels over time. Instead, enforcement agency performance is typically assessed by counting the number of enforcement actions, rather than by evaluating their quality.⁵³ In sum, better data would help researchers and the government alike establish whether our enforcement regime is adequately deterring crime.

However, if our results are confirmed with further study, the normative implications seem to be clear. To increase deterrence, enforcement agencies should consider increasing the number of enforcement actions that are brought or pursuing culpable individuals. If it is currently too difficult and expensive for agencies to prosecute individuals, proposals like Senator Warren’s, which aim to make it easier for agencies to pursue guilty individuals, provide a solution.⁵⁴ We explore other policy options for enforcement agencies and lawmakers in Part IV.

⁵² U.S. SENTENCING COMM’N, QUICK FACTS: ORGANIZATIONAL OFFENDERS 1 (2018), https://www.ussc.gov/sites/default/files/pdf/research-and-publications/quick-facts/Organizational-Offenders_FY18.pdf (noting that 62.5% of organizational offenders were closely-held or private corporations, while only 7.5% of organizational offenders were publicly traded).

⁵³ This can lead to perverse consequences. *Cf.* Testimony of Dr. Shelley H. Metzbaum before the House Committee on Government Reform, Subcommittee on Energy Policy, Natural Resources, and Regulatory Affairs, Hearings on EPA and State Enforcement of Water Laws (Oct. 14, 2003) (“Even when enforcement targets are not formally established, agency staff tend to assume they must meet or exceed the previous year’s enforcement levels. This can create a pressure to find enforcement practices just to meet a target . . .”).

⁵⁴ See Anello, *supra* note 14.

Our paper proceeds as follows. Part II describes the current enforcement regime in detail, as well as its origins in law and economics theory. Part III describes our data and results, which indicate that financial crime is on the rise and supplies a possible cause—an overreliance on fines as the primary form of punishment. Part IV identifies flaws in the law and economics literature that has guided enforcement as a possible cause of the underdeterrence we identify. It also discusses implications for lawmakers. In particular, the government should adopt a data-driven approach to enforcement, in light of theoretical flaws we identify. In addition, if it is not possible to calculate optimal entity-level fines as theory would prescribe, enforcement agencies should consider other ways of deterring crime, such as by pursuing penalties against individuals. It also supplies recommendations to guide future research in this area. Part V concludes.

II. Corporate Criminal Enforcement: Theory and Practice

In the United States, corporations can be held criminally liable for crimes committed by agents in the scope of employment through the doctrine of respondeat superior.⁵⁵ When we discuss “corporate crime,” we are referring to crimes committed by corporate agents that could be attributed to the entity under this doctrine. If convicted of a crime, the corporate entity can be subject to a wide range of penalties, including fines, restitution, community service, and a loss of charter (of course, the guilty agents can also be subject to liability).⁵⁶

Nobel Laureate Gary Becker famously developed an “economic approach” to criminal punishment.⁵⁷ His main thesis, which has guided decades of future work in criminal law, is that the optimal level of criminal enforcement requires trading off the benefits to society from punishing and deterring crime against the costs of catching and punishing offenders. In his baseline model, the costs of different punishments to the offender are compared by “converting them into their monetary equivalent or worth.”⁵⁸ For dollar penalties, these costs are of course readily observable. For penalties like prison sentences, “costs” in the Beckerian framework include foregone earnings and foregone consumption.⁵⁹ Because the social cost of punishment is the total cost to offenders plus the cost or (minus the gain) to others, fines are preferable to prison stays of the same “cost,” because the social cost of fines is about zero. Roughly stated, the theory makes a case for punishment by “optimal fine,” and argues that goal of the legal system is to levy fines equal to the harm inflicted on society by constraints on trade.

In the decades that followed, Becker’s basic claim—that crime can and should be punished by optimal fines—permeated corporate criminal law scholarship. In addition, a growing law and economics literature studying corporate crime viewed entity-liability with a skeptical eye. For example, commentators voiced concerns that criminal liability may overdeter beneficial corporate activity or have other harmful effects, such as higher consumer prices—especially in light of the

⁵⁵ V.S. Khanna, *Corporate Criminal Liability: What Purpose Does it Serve?*, 109 HARV. L. REV. 1477, 1489 (1996).

⁵⁶ *See id.* at 1529. Of course, criminal prosecutions are not the only way to encourage socially beneficial corporate behavior. New regulations and compliance systems to enforce them can help address problems like financial misconduct, workplace sexual harassment, etc. However, the empirical evidence suggests that the efficacy of these ex-ante compliance management systems is limited. *See* Cary Coglianese & Jennifer Nash, *Compliance Management Systems*, Cambridge Handbook of Compliance, forthcoming.

⁵⁷ *See* Becker, *supra* note 19.

⁵⁸ *Id.* at 170.

⁵⁹ *Id.*

fact that criminal liability is often imposed alongside civil liability.⁶⁰ Therefore, in determining how to set an optimal level of corporate criminal enforcement from a deterrence perspective, law and economics scholars offered the following guideposts.

First, the optimal amount of corporate crime is unlikely to be zero. A corporation is a nexus of contracts between individuals, some of whom may break the law without the awareness of other employees.⁶¹ In this respect, it seems strange to penalize the entity for the crime of an agent. However, entity liability can be useful if it induces the company to monitor employees and prevent future incidents of crime.⁶² However, it may be expensive for the company to invest resources in preventing all future incidents of crime, and the cost could exceed the benefit. Ideally, a company would only invest in monitoring up to the point that the marginal cost of monitoring equals the marginal social gain (i.e., the reduction in social harm from crime by corporate agents).⁶³

In general, an optimal enforcement regime would follow Becker's analysis and set the criminal penalty equal to the social cost of the crime, which equals the sum of the cost of the harm from crime as well as the cost of its prevention (more on this latter point in the next paragraph), adjusted for the probability of detection.⁶⁴ Calibrating the penalty in this way would induce the corporation to spend the socially optimal amount on prevention efforts because the corporation's private gains from monitoring will equal the social gains. For example, if a corporation's criminal activity has a social cost of \$100 million, but it expects that it will be required to pay a fine of \$50 million if it is caught. Quite obviously, the company will pay too little on prevention efforts and engage in a suboptimal level of crime. Setting the penalty at \$100 million will induce the company to pay the right amount to avoid future incidence of crime.

Second and relatedly, the social cost of the crime includes not just costs to victims, but also costs to the criminal justice system itself. From that insight comes the following practical guidance: enforcement agencies can help alleviate costs associated with crime by considering the expense of different methods of imposing deterrence. Relatedly, agencies face limited budgetary resources, which means that spending government money on one enforcement action precludes spending money elsewhere. Agencies can therefore maximize their limited budgets by minimizing the costs associated with each enforcement action.⁶⁵ For example, why take a company to trial—a costly

⁶⁰ See, e.g., A. Mitchell Polinsky & Steven Shavell, *Enforcement Costs and the Optimal Magnitude and Probability of Fines*, 35 J.L. & ECON. 133 (1992) [hereinafter Polinsky & Shavell, *Enforcement Costs*]; Fischel & Sykes, *supra* note 21, at 321 (noting that the combination of both civil and criminal liability often results in “overdeterrence *ex ante*, and an excessive investment of resources in litigation *ex post*.”).

⁶¹ See Michael C. Jensen & William H. Meckling, *The Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. FIN. ECON. 305, 310 (1976) (describing organizations as “legal fictions which serve as a nexus for a set of contracting relationships among individuals.”).

⁶² See Arlen & Kraakman, *supra* note 50, at 700 (observing that “entity liability is justified if it induces the firm to sanction wrongdoing more cheaply than the government can”); Becker, *supra* note 19, at 190-93; see also Fischel & Sykes, *supra* note 21, at 324 (“It is plainly undesirable for firms to invest infinite resources to prevent their agents’ parties from committing crimes, even if those crimes themselves are clearly unproductive.”).

⁶³ Fischel & Sykes, *supra* note 21, at 324 (“[M]onitoring is desirable . . . up to the point at which its marginal cost would exceed the marginal social gain in the form of reduced social harm from criminal activity.”)

⁶⁴ *Id.*

⁶⁵ Cf. Dorothy Shapiro, *Lessons from SEC v. Citigroup: The Optimal Scope for Judicial Review of Agency Consent Decrees*, 64 MICH ST. J. BUS. & SEC. L. 63 (2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2246033.

and burdensome process—when the agency could instead secure a massive fine in a settlement?⁶⁶ Why charge individuals—which is expensive, and sure to result in a lengthy fight, when it is possible to charge the entity instead?⁶⁷ Why send an individual to prison, which burdens the state, when it is possible charge an entity-level fine that will generate revenue and also induce the company to invest in deterrence?⁶⁸ And why pursue every incidence of misconduct when it is possible to simply ratchet up the penalty to compensate for the decreased likelihood of detection and punishment?⁶⁹ In sum, accounting for regulatory burdens often cautions in favor of pursuing entity liability rather than individual liability, settling cases rather than taking them to trial, and pursuing blockbuster fines against a few bad actors rather than attempting to catch and punish every criminal act.

Third, law and economics scholars have offered additional guidance about when entity liability would be preferable to individual liability from the perspective of shareholders, as well as society at large. Because individual managers are less suited to bearing risk than diversified shareholders, shareholders might prefer entity-level liability to individual liability.⁷⁰ Indeed, if managers were subject to criminal liability, that might make them extremely risk averse and require them to demand a risk premium (increasing costs for shareholders), or else forgo risky but beneficial projects.⁷¹ Relatedly, whenever individuals are judgment proof, they might not be induced to exercise socially optimal levels of care via fines—the only option to secure adequate deterrence would be something more, like jail time, which again, imposes far greater social costs.⁷² By contrast, the entity is much more likely to be able to bear the high fine necessary to achieve optimal deterrence. A final reason to prefer entity liability over individual liability is that corporations may be the most cost-effective providers of prevention and policing. When that is

⁶⁶ See generally Richard A. Posner, *An Economic Approach to Legal Procedure and Judicial Administration*, 2 J. LEGAL STUD. 399 (1973); Steven Shavell, *Suit, Settlement, and Trial: A Theoretical Analysis Under Alternative Methods for the Allocation of Legal Costs*, 11 J. LEGAL STUD. 55, 59 (1982) (noting that willingness to go to trial “depends on an ex ante evaluation of the chance of prevailing, on the probable magnitude of a judgment, and on the legal costs of going to trial and the method by which they are to be allocated.”); Posner, *An Economic Theory of Criminal Law*, *supra* note 45; see Bruce H. Kobayashi, *Case Selection, External Effects, and the Trial/Settlement Decision*, in DISPUTE RESOLUTION: BRIDGING THE SETTLEMENT GAP 17, 17–31 (David A. Anderson ed., 1996) (noting the efficiency gains from settlement versus trial in the case of corporations).

⁶⁷ Posner, *An Economic Theory of Criminal Law*, *supra* note 45; Kobayashi, *supra* note 66; JESSE EISINGER, *THE CHICKENSHIT CLUB: WHY THE JUSTICE DEPARTMENT FAILS TO PROSECUTE EXECUTIVES* (Simon & Schuster, 2017) [hereinafter EISINGER, *CHICKENSHIT CLUB*].

⁶⁸ Posner, *An Economic Theory of Criminal Law*, *supra* note 45, at 1206-07 (“For while the costs of apprehending and convicting criminals rise with the probability of apprehension . . . the costs of collecting fines are by assumption zero regardless of their size.”).

⁶⁹ Polinsky & Shavell, *Should Employees Be Subject to Fines?*, *supra* note 48.

⁷⁰ Reinier H. Kraakman, *Corporate Liability Strategies and the Costs of Legal Controls*, 93 YALE L. J 857, 866-67 (1984) (arguing that “enterprise liability is the normal form of corporate liability in the prescriptive as well as the descriptive sense” since it “induces compliance without complicating the manager-shareholder contract or disturbing the advantageous intra-firm allocation of business risk.”). However, if managers are insured or indemnified, same risk sharing benefit is achieved. Fischel & Sykes, *supra* note 21, at 1245.

⁷¹ Kraakman, *supra* note 70, at 865 (“As undiversified risk bearers who gamble all their personal assets, uninsured managers will of course demand a very large risk premium if they are simply paid outright for enduring even a small probability of catastrophic personal liability.”); see Jonathan R. Macey, *Agency Theory and the Criminal Liability of Corporations*, 71 B.U. L. REV. 315, 322 (1991) (discussing “excessive risk-aversion by corporate actors” as one of the ways in which agency costs manifest).

⁷² Polinsky & Shavell, *Should Employees Be Subject to Fines?*, *supra* note 48.

the case, the state should primarily focus on inducing firms to undertake the right level of prevention measures.⁷³

In sum, the law and economics literature has traditionally embraced Becker's framework, and in so doing, theorized that enforcement agencies should utilize high fines over imprisonment, sporadic enforcement and settlement over consistent enforcement and full trials, and entity liability and compliance reform over individual liability. Each of these precepts would minimize enforcement costs without sacrificing deterrence, so long as fines equal the social cost of the crime adjusted upward for the probability of detection. In addition, the literature has begun from the premise that a central concern in calibrating an enforcement regime is minimizing the risk of overdeterrence. Again, the optimal amount of crime is unlikely to be zero, and so aggressive criminal enforcement (coupled with civil liability) could induce expensive compliance efforts and chill beneficial corporate activity, harming company competitiveness and raising consumer prices.

Overall, these precepts have influenced enforcement agency practice in four main ways. In the past few decades, enforcement agencies have brought fewer corporate prosecutions, increased the number of settlements, brought fewer actions against individuals, and sought higher and higher fines.⁷⁴ First, corporate prosecutions and convictions have been steadily falling. For example, the number of corporate prosecutions filed by the Department of Justice fell 29% between from 2004 and 2014.⁷⁵ This trend has continued since then, and in 2018, the number of corporate convictions fell to 99, breaking a record for the lowest number ever recorded.⁷⁶

Second, although the number of prosecutions has declined, the number of settlements has increased—especially among the largest companies.⁷⁷ From 2006 to 2019, for example, only twelve corporations were convicted after a trial. Traditionally, the DOJ would settle cases with companies using a plea agreement, after charges were filed in court.⁷⁸ Today, an increasing share of corporate criminal enforcement actions are settled without a plea, using non-prosecution agreements or “NPAs” and deferred prosecution agreements or “DPAs.”⁷⁹ The use of these

⁷³ Arlen, *Corporate Criminal Liability*, *supra* note 23, at 165 (“Firms subject to [strict corporate] liability will adopt the prevention measures that minimize both their expected costs and total social costs.”).

⁷⁴ Note that this article focuses on enforcement at the federal level, where “the most significant and complex [] cases have long been brought.” See Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 1).

⁷⁵ TRANSACT'L RECORDS ACCESS CLEARINGHOUSE, JUSTICE DEPARTMENT DATA REVEAL 29 PERCENT DROP IN CRIMINAL PROSECUTIONS OF CORPORATIONS (2015), <https://trac.syr.edu/tracreports/crim/406/>; see also Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 12-14).

⁷⁶ RICK CLAYPOOL, PUBLIC CITIZEN, SOFT ON CORPORATE CRIME: DOJ REFUSES TO PROSECUTE CORPORATE LAWBREAKERS, FAILS TO DETER REPEAT OFFENDERS 9 (2019) [hereinafter CLAYPOOL, SOFT ON CORPORATE CRIME], <https://www.citizen.org/article/soft-on-corporate-crime-deferred-and-non-prosecution-repeat-offender-report/>.

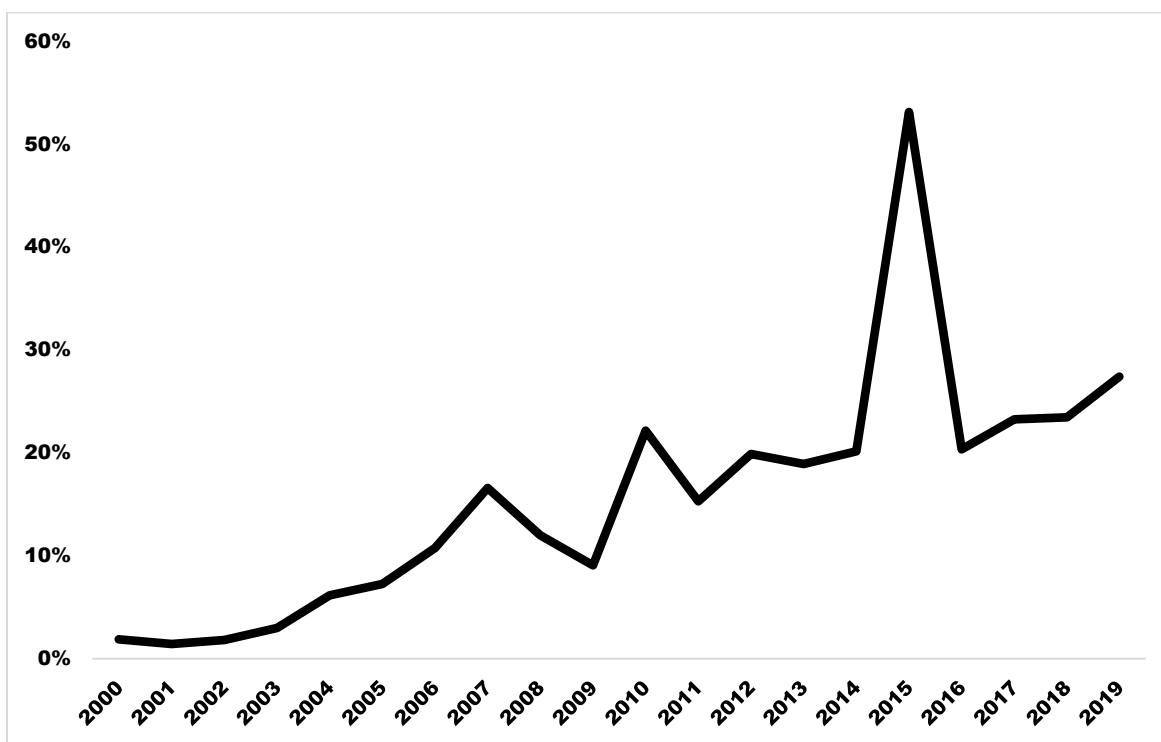
⁷⁷ See *id.* at 15 (arguing that the largest companies are treated most leniently and contending that this is the result of the Thompson Memo, which directed prosecutors to consider “potential adverse effects on a corporation’s shareholders and employees when deciding whether to bring charges against a corporation.”).

⁷⁸ See Kobayashi, *supra* note 66 (noting the efficiency gains from settlement versus trial in the case of corporations).

⁷⁹ The main difference between NPAs and DPAs is that DPAs require charges to be filed in court—the prosecutor agrees to defer the prosecution of charges during a predefined time period. By contrast, NPAs are not required to be filed in court, and therefore, the judge does not approve the terms of the settlement. Arlen & Kahan, *supra* note 16, at 332-33. For a critique of settling cases using these tools, see Jennifer Arlen, *Prosecuting Beyond the Rule of Law: Corporate Mandates Imposed Through Deferred Prosecution Agreements*, 8 J. LEGAL ANALYSIS 191 (2016) [hereinafter Arlen, *Prosecuting Beyond the Rule of Law*]. Note that the rise in DPAs and NPAs has also

settlements reached a high point of 102 in 2015 (which represented approximately a ten-fold increase from 2005).⁸⁰ That number has since fallen off somewhat, but the percentage of corporate crime cases that are settled remains much higher than early-2000s levels. Put somewhat differently, the share of DPAs and NPAs brought against corporations out of the total number of prosecutions has been steadily rising over the past two decades, with a sharp spike in 2015.⁸¹ Relatedly, the number of corporate declinations, where the DOJ determines that a case has merit but is not pursued because of the company’s “voluntary disclosure, full cooperation, remediation, and payment of disgorgement, forfeiture, and/or restitution,”⁸² are rising for FCPA cases.⁸³ This type of settlement is especially lenient for defendants, as the government essentially determines that it will not take on a case that it thinks has merit.⁸⁴

Figure 1: Deferred and Non-Prosecution Agreements (Share of Total Prosecutions)⁸⁵



corresponded with an increase in imposition of a corporate monitor, which helps ensure compliance at the firm going forward. See Vikramaditya Khanna & Timothy L. Dickinson, *The Corporate Monitor: The New Corporate Czar?*, 105 MICH. L. REV. 1713, 1740-42 (2007) [hereinafter Khanna, *The Corporate Monitor*].

⁸⁰ The DOJ almost never settles charges against individuals using a DPA or NPA. See CLAYPOOL, SOFT ON CORPORATE CRIME, *supra* note 76, at 11 (showing that less than 1% of individuals receive “pre-trial diversions from federal prosecutors”).

⁸¹ As Garrett explains, “the main reason [for the 2015 increase] is the large number of non-prosecution agreements entered in 2015 with Swiss Banks as part of a program to offer lenient settlements as part of self-reporting and cooperation. None of those cases involved individual charges filed, including for practical and jurisdictional reasons; the banks tended to be small or mid-sized Swiss banks (albeit ones providing tax shelters to U.S. taxpayers).” Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 24).

⁸² *Id.* (manuscript at 10).

⁸³ *Id.* (manuscript at 10-11).

⁸⁴ *Id.* (manuscript at 12).

⁸⁵ Garrett, *Corporate Prosecution Registry*, *supra* note 28.

Third, individuals are only rarely charged when charges are settled via DPA and NPA. In a study of DPAs and NPAs entered into from 2001 to 2014, Brandon Garrett found that only 34% had officers or individuals prosecuted.⁸⁶ Even in the wake of the Yates memo which admonished enforcement agencies to pursue individuals more often,⁸⁷ not much changed—“if anything, individual charging [] declined in the years since [the memo] was adopted.”⁸⁸ Moreover, even when individuals are charged, they are more likely than not to get off without jail time: Of the 414 individuals prosecuted from 2001 to 2014, only 42% received any jail time.⁸⁹ Since then, the Trump administration has amended the Yates memo to emphasize that investigations should not be delayed “merely to collect information about individuals whose involvement was not substantial, and who are not likely to be prosecuted.”⁹⁰

⁸⁶ Brandon L. Garrett, *The Corporate Criminal as Scapegoat*, 101 VA. L. REV. 1789, 1791 (2015) [hereinafter Garrett, *Corporate Criminal as Scapegoat*]. Most were low-level employees. *Id.* However, individual employees can be implicated in wrongdoing in the settlement documents. And these admissions can lead to reputational harm and expose the individuals to follow-on civil suits. See Asaf Ekshtein & Gideon Parchomovsky, *The Reverse Agency Problem in the Age of Compliance* (U. of Penn., Inst. for Law & Econ. Research Paper No. 19-38, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3460064. Gaining a better understanding of these harmful results will important for calibrating deterrence going forward.

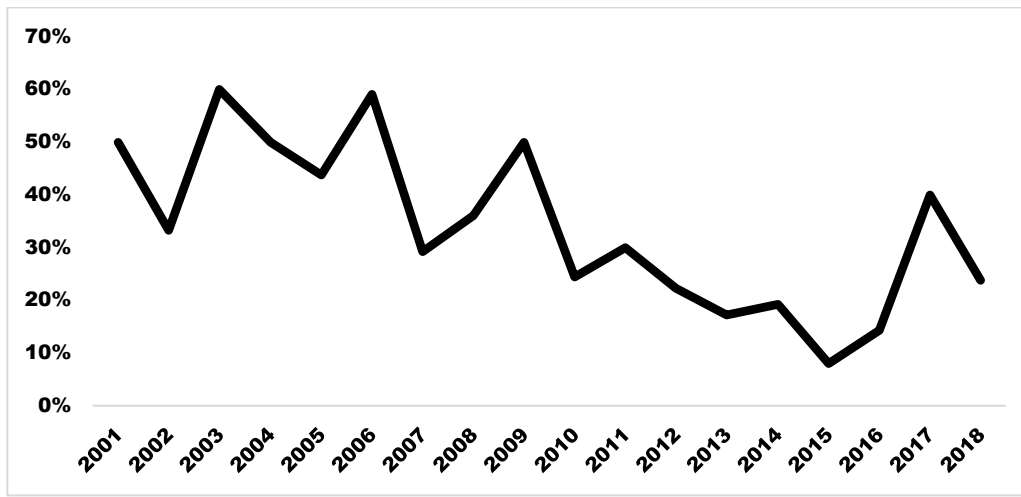
⁸⁷ Memorandum from Sally Yates, U.S. Deputy Att’y Gen., to all U.S. Att’ys. 1, 2 (Sept. 9, 2015) (available at: <https://www.justice.gov/archives/dag/file/769036/download>) (advising attorneys to focus on individuals in criminal and civil investigations, since “[o]ne of the most effective ways to combat corporate misconduct is by seeking accountability from the individuals who perpetrated the wrongdoing.”).

⁸⁸ Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 24).

⁸⁹ Garrett, *Corporate Criminal as Scapegoat*, *supra* note 86, at 1792.

⁹⁰ Rod J. Rosenstein, Deputy Att’y Gen., Dep’t of Justice, Remarks at the American Conference Institute’s 35th International Conference on the Foreign Corrupt Practices Act (Nov. 29, 2017) [hereinafter Rosenstein Remarks] (transcript available at: <https://www.justice.gov/opa/speech/deputy-attorney-general-rod-j-rosenstein-delivers-remarks-american-conference-institute-0>; see also U.S. Dep’t of Justice, U.S. Attorneys’ Manual § 9-28.210 (2018), <https://www.justice.gov/jm/justice-manual>).

Figure 2: DPAs and NPAs with Corresponding Individual Suits (Share of Total) ⁹¹



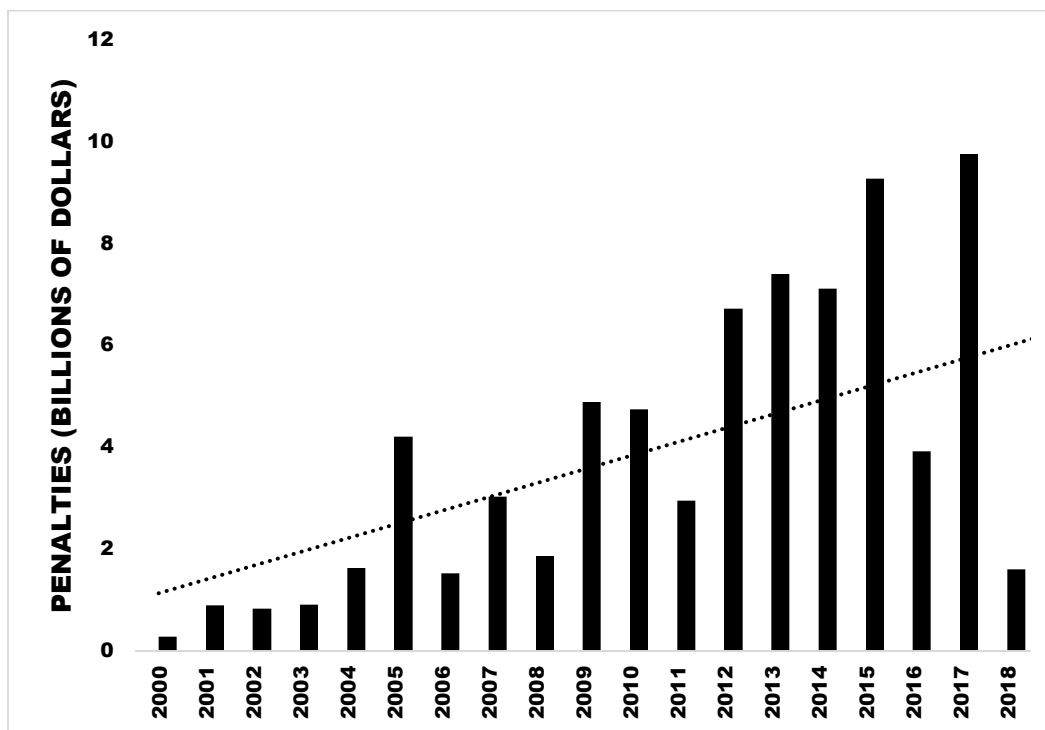
Fourth and finally, although individual punishment has declined, entity-level fines have steadily increased over the past two decades, only falling off to return to pre-crisis levels in 2018. This reversal in a decades-long trend toward increased fines is reflective of a skeptical DOJ attitude toward large financial penalties. In 2018, then-Deputy Attorney General Rod Rosenstein stated that corporate prosecutions should “avoid imposing penalties that disproportionately punish innocent employees, shareholders, customers and other stakeholders.”⁹² In a separate speech, he described a new policy that would help enforcement agencies avoid “piling on” that occurs when multiple regulators impose fines involving the same conduct, again, out of a concern for “innocent employees, customers, and investors.”⁹³

⁹¹ Garrett, *Corporate Prosecution Registry*, *supra* note 28. 2015 shows a slight increase from the previous years, but we view this as an anomalous year, because this is the year where the DOJ rolled out its Swiss Bank Program targeting banks that sheltered U.S. income. That program allowed banks to secure NPAs in exchange for disclosure of information relating to those accounts, which accounts for both the increase of individual prosecutions as well as the record-breaking total of DPAs and NPAs in that year. WHITE COLLAR DEFENSE & INVESTIGATIONS PRACTICE GROUP, GIBSON DUNN, 2015 MID-YEAR UPDATE ON CORPORATE NON-PROSECUTION AGREEMENTS (NPAs) AND DEFERRED PROSECUTION AGREEMENTS (DPAs) (2015) [hereinafter GIBSON DUNN UPDATE], <https://www.gibsondunn.com/2015-mid-year-update-on-corporate-non-prosecution-agreements-npas-and-deferred-prosecution-agreements-dpas/>.

⁹² Rosenstein Remarks, *supra* note 90; *see* Ben Protess, et al., *Corporate Wrongdoers Get Break Under Trump*, N.Y. TIMES, Nov. 4, 2018, at A1, <https://www.nytimes.com/2018/11/03/us/trump-sec-doj-corporate-penalties.html>.

⁹³ Rosenstein Remarks, *supra* note 90.

Figure 3: Aggregate Annual Corporate Criminal Penalties for all Prosecutions (Billions of Dollars)⁹⁴



In sum, law and economics scholars have much to like about how the current federal enforcement regime has developed in the past two decades. The DOJ has generally forgone individual liability in favor of entity-liability, favored settlements over trials, and until 2018, sought higher and higher fines to compensate for the reduced number of prosecutions.

And if we look at the subset of prosecutions that involve banks, these trends are even starker. Before the financial crisis, banks were only rarely prosecuted. That changed in the wake of the financial crisis, where the DOJ secured a record-breaking amount of fines against financial institutions.⁹⁵ Indeed, nearly \$7 billion of the total \$9 billion paid in corporate penalties in 2015 came from financial institutions.⁹⁶ But these fines are composed of a handful of blockbuster cases—the overall number of prosecutions has generally remained steady in the past few years,

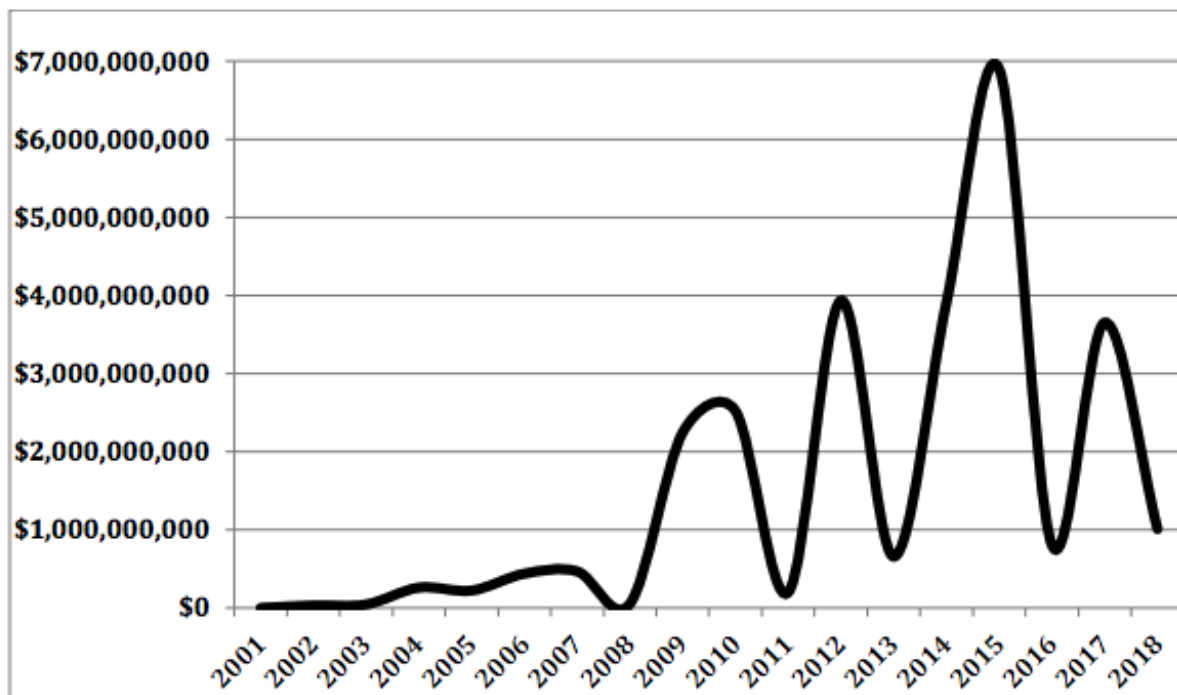
⁹⁴ Garrett, *Corporate Prosecution Registry*, *supra* note 28. Note that the penalty amount is the total of fines paid to the U.S. government, and does not include amounts paid to settle investor lawsuits or to foreign governments.

⁹⁵ We borrow Brandon Garrett’s definition for financial institutions, which include “a range of types of companies that focus on financial transactions, including commercial banks, investment banks, insurance companies, and brokerages.” Garrett, *Corporate Criminal as Scapegoat*, *supra* note 86, at 1816.

⁹⁶ Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 24). Most of these bank settlements were part of a “Swiss Bank Program,” which targeted banks marketing illegal tax shelters. This program provided incentives for banks who disclosed the names of tax evaders in the U.S. *See* Swiss Bank Program, U.S. DEP’T OF JUSTICE, <http://www.justice.gov/tax/swiss-bank-program>. This program has since been winding down. Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 24).

and it has fallen since 2017.⁹⁷ In addition, the vast majority of fines were secured via settlement, rather than after trial and conviction.⁹⁸

Figure 4. Financial Institution Penalties, 2001-2018⁹⁹



In addition, when banks are pursued, individual bankers are rarely charged. As Judge Jed Rakoff complained, as of 2014, no high-level executives had been successfully prosecuted in connection with the financial crisis.¹⁰⁰ From 2001-2014, of the 66 DPAs and NPAs entered into with financial institutions, only 23 cases, or 35%, featured individual prosecutions.¹⁰¹ Most of these involved low-level employees.¹⁰² For certain types of financial institution crime, there is a

⁹⁷ *Id.* (manuscript at 12) (“As noted, in the last 18 months of the Obama Administration, 65 financial institutions were prosecuted, while during the first 18 months of the Trump Administration, 13 financial institutions were prosecuted.”); see also M. KENDALL DAY ET AL., GIBSON DUNN, DEVELOPMENTS IN THE DEFENSE OF FINANCIAL INSTITUTIONS (2019) [hereinafter GIBSON DUNN DEVELOPMENTS], <https://www.gibsondunn.com/wp-content/uploads/2019/01/developments-in-defense-of-financial-institutions-jan-2019.pdf>.

⁹⁸ GIBSON DUNN DEVELOPMENTS, *supra* note 97, at apps.

⁹⁹ Garrett, *Declining Corporate Prosecutions*, *supra* note 15 (manuscript at 12-13 fig. 2).

¹⁰⁰ Rakoff, *Why Have No High-Level Executives Been Prosecuted?*, *supra* note 44.

¹⁰¹ Those cases involved deferred and non-prosecution agreements with Baystar Capital Management LLC (fraud); ConvergeX Group, LLC (securities fraud); Deutsche Bank AG (tax fraud); Diamondback Capital Management LLC (securities fraud); GE Funding Capital Market Services, Inc. (FCPA); German Bank HVB (tax fraud); Jefferies Group LLC (fraud); JPMorgan Chase & Co. (antitrust); Louis Berger Group (fraud); Mellon Bank, N.A. (theft); Merrill Lynch (false statements); Mirant Energy Trading (false commodities reporting); NETeller PLC (illegal gambling); Omega Advisors (FCPA); Prudential Equity Group (securities fraud); Rabobank (wire fraud); and UBS AG (three separate cases involving tax fraud, antitrust, and wire fraud). See Garrett, *Corporate Criminal as Scapegoat*, *supra* note 86, at 1816 n.110.

¹⁰² Garrett, *Declining Bank Prosecutions*, *supra* note 15, at 23.

complete dearth of individual prosecution. As an example, no individual employees or officers were prosecuted in cases involving alleged violations of the Bank Secrecy Act, which proscribes money laundering.¹⁰³

In theory, these enforcement practices could be consistent with an optimal deterrence regime. Again, so long as fines are equal to the social cost of crime multiplied by the probability of detection, we should expect that companies will spend the right amount of money to prevent future wrongdoing. However, this is not how fines are calculated.¹⁰⁴ The sentencing guidelines instead require the organization to remedy harm. The guidelines then set the fine range based on “the seriousness of the offense” (reflected by the amount of pecuniary loss), as well as the corporation’s “culpability.” Organizational culpability is based on, “(i) the involvement in or tolerance of criminal activity; (ii) the prior history of the organization; (iii) the violation of an order; and (iv) the obstruction of justice.”¹⁰⁵ The guidelines also allow penalty mitigation whenever the company has “an effective compliance program” or cooperates with authorities.¹⁰⁶ In other words, the sentencing guidelines scale penalties upwards based not on the probability of non-detection, but instead on culpability; penalties are adjusted downwards as a reward for cooperation.¹⁰⁷

Without an effort to calculate fines in a way that is optimal, the federal enforcement regime might not be deterring crime sufficiently. Indeed, it is probably not possible for the state to estimate the marginal cost of corporate crime.¹⁰⁸ Then how can we know whether our enforcement system is adequately deterring corporate crime?

The answer to this question is subject to much debate. On the one hand, many politicians,¹⁰⁹ judges,¹¹⁰ academics,¹¹¹ and journalists¹¹² are skeptical that our current enforcement regime is

¹⁰³ Garrett, *Corporate Criminal as Scapegoat*, *supra* note 86, at 1816. As Federal District Judge Emmett G. Sullivan stated when considering a DPA against Barclays bank for Bank Secrecy Act violations: “No one goes to jail, no one is indicted, no individuals are mentioned as far as I can determine . . . there’s no personal responsibility.” *Id.* at 1817. Other public officials have complained about the lack of individual charges in money laundering cases. *Id.*

¹⁰⁴ See Arlen, *Corporate Criminal Liability*, *supra* note 23, at 189 (“Nevertheless, current practice does not fit all the requirements of an optimal corporate liability system in that federal authorities have not adopted clear guidelines to ensure that civil regulators and the DOJ impose optimal residual sanctions on firms – sanctions that take full account of the variety of ways in which firms bear the social costs of crime.”).

¹⁰⁵ SENTENCING GUIDELINES, *supra* note 23, introductory cmt.

¹⁰⁶ *Id.* For a critique of this mitigation system, see Jennifer Arlen, *The Failure of the Organizational Sentencing Guidelines*, 66 U. MIAMI L. REV. 321 (2012) [hereinafter Arlen, *Organizational Sentencing Guidelines*].

¹⁰⁷ Of course, as the previous section made clear, most fines are imposed not by courts, but by agencies pursuant to a settlement. However, most settlements provide a guidelines-informed fine range, indicating that the guidelines are affecting the determination of the fine size. ALEXANDER, TRENDS IN THE USE OF NON-PROSECUTION, *supra* note 27, at 38-41. This same study found that the base guideline fine was higher for DPAs and NPAs, but there was also much more variability across crimes that were the subject of DPAs and NPAs. *Id.* at 39 (\$189 million and \$219 million for DPAs and NPAs, respectively, as compared to the \$75.7 million for pleas at the mean).

¹⁰⁸ Cf. Baumol & Oates, *supra* note 25.

¹⁰⁹ See, e.g., Corporate Executive Accountability Act, S. 1010, 116th Cong. (2019) (as referred to the S. Comm. on the Judiciary), <https://www.congress.gov/bill/116th-congress/senate-bill/1010/text>.

¹¹⁰ See, e.g., Rakoff, *Why Have No High-Level Executives Been Prosecuted?*, *supra* note 44.

¹¹¹ See, e.g., BRANDON L. GARRETT, TOO BIG TO JAIL: HOW PROSECUTORS COMPROMISE WITH CORPORATIONS (2014); Samuel W. Buell, *The Responsibility Gap in Corporate Crime*, 12 CRIM. L. & PHIL. 471 (2018); Garrett, *Declining Corporate Prosecutions*, *supra* note 15; Garrett, *Corporate Criminal as Scapegoat*, *supra* note 86.

¹¹² See, e.g., EISINGER, CHICKENSHIT CLUB, *supra* note 67.

supplying adequate deterrence. For example, Judge Jed Rakoff has been a vocal critic of prosecutorial efforts in the wake of the financial crisis. He contrasted the DOJ's decision to not prosecute any high-level individuals with the savings and loan crisis of the 1980s, after which hundreds of individuals were prosecuted.¹¹³ Likewise, politicians have sought reforms that would make it easier to prosecute bankers. In 2018, for example, Senator Warren introduced the "Ending Too Big to Jail Act," which would require officers of any bank with more than \$10 billion in assets to certify every year that they have not uncovered any criminal or civil misconduct.¹¹⁴ Any executive who "willfully" files a false certification, would be eligible for jail time.¹¹⁵ The DOJ under the Trump Administration has taken the opposite view and adopted policies that further relax penalties as a reward for compliance,¹¹⁶ decrease the likelihood of individual prosecutions,¹¹⁷ and limit the size of fines and other penalties in favor of securing "reasonable and proportionate outcomes in major corporate investigations."¹¹⁸

In order to resolve this debate, it would be helpful to know whether our enforcement is adequately deterring corporate crime. And this Article proposes that if it is not possible to accurately measure inputs, it may be possible to observe outputs. Put differently, the inability to calculate optimal fines might not matter as much if we could study trends in corporate activity over time, and calibrate fines and penalties based on that information. However, unlike every other type of criminal crime, there is no attempt by the government to estimate corporate crime levels.¹¹⁹ Thanks to Brandon Garrett, we have ample data about corporate crime enforcement—the number of prosecutions, convictions, and settlements, as well as their terms.¹²⁰ We can therefore accurately describe our enforcement regime and its shifting priorities. What we cannot tell is whether that regime is adequately deterring corporate crime. Therefore, in the next section, we take first steps toward estimating whether financial crime has been increasing or decreasing over time.

III. Financial Crime on the Rise

In this section, we consider whether certain types of financial crime are rising or falling based on three distinct proxies for financial crime: the database of Suspicious Activity Reports (SARs) maintained by the Financial Crimes Enforcement Network at Treasury (FinCEN), a consumer complaints database maintained by the CFPB, and data provided by the SEC's

¹¹³ See Rakoff, *Why Have No High-Level Executives Been Prosecuted?*, *supra* note 44; see also EISINGER, CHICKENSHIT CLUB, *supra* note 67.

¹¹⁴ Peter J. Henning, *Why Elizabeth Warren's Effort to Hold Bank Executives Accountable May Fall Short*, N.Y. TIMES (Apr. 3, 2018), <https://www.nytimes.com/2018/04/03/business/dealbook/elizabeth-warrens-bank-executives-accountability.html>.

¹¹⁵ *Id.*

¹¹⁶ CRIM. DIV., U.S. DEP'T OF JUSTICE, EVALUATION OF CORPORATE COMPLIANCE PROGRAMS 2 (2019), <https://www.justice.gov/criminal-fraud/page/file/937501/download>; see Geeja T. Gobena et al., *United States: DOJ Refines Cooperation Requirements of FCPA Corporate Enforcement Policy*, MONDAQ (Nov. 29, 2019), <http://www.mondaq.com/unitedstates/x/869458/White+Collar+Crime+Fraud/DOJ+refines+cooperation+requirements+of+FCPA+corporate+enforcement+policy> (discussing several changes to DOJ policy designed to account for "practical realities" of enforcement while also creating "flexibility for corporate actors").

¹¹⁷ See Garrett, *Declining Corporate Prosecutions*, *supra* note 15.

¹¹⁸ Rosenstein Remarks, *supra* note 90.

¹¹⁹ BJS White Collar Reports, *supra* note 27 (showing that the last estimate of white collar crime was in 1983).

¹²⁰ Garrett, *Corporate Prosecution Registry*, *supra* note 28.

whistleblower program. We then study corporate recidivism, relying on enforcement data from Brandon Garrett. We address each dataset in turn.

A. Suspicious Activity Reports

SARs are an anonymous mechanism to report suspected money laundering and other financial crimes used by institutions subject to the Bank Secrecy Act.¹²¹ The intuition behind the SAR requirement is that financial institutions are best positioned to detect illegal use of the financial system; as such, they should be enlisted in helping the government root out financial crime.

SARs are required to be filed whenever an employee or other individual¹²² suspects that an agent within the institution has attempted to perform a transaction in furtherance of money laundering and other financial crime.¹²³ However, suspicious transactions below a \$5,000 threshold do not require a SAR report.¹²⁴ The failure to comply with SAR filing requirements is punishable by criminal and civil penalties, including large fines, loss of the bank's charter, and imprisonment.¹²⁵ As a result, all financial institutions train employees on how to identify and flag suspicious activity.¹²⁶

SAR reports are confidential, meaning that the person that is the subject of the report is not told about it, nor is anyone outside of the institution privy to the information. Any unauthorized disclosure is punishable as a criminal offense. In addition, the SAR report filer need not disclose their name and are awarded immunity during the discovery process.¹²⁷

A SAR report describes the suspicious behavior, the crime categories to which the behavior pertains,¹²⁸ and the agent's relationship with the institution (*e.g.*, customer, supplier, insider, etc.). After the institution receives a report, it must undertake a multi-stage review process, which ultimately entails sending it to the bank's financial investigators, management, and attorneys.¹²⁹ Financial institutions are required to file SARs within 30 days after the detection of suspicious

¹²¹ See Suspicious Activity Reports (SARs), OFFICE OF THE COMPTROLLER OF THE CURRENCY, <https://www.occ.treas.gov/topics/supervision-and-examination/bank-operations/financial-crime/suspicious-activity-reports/index-suspicious-activity-reports.html> (last updated Dec. 3, 2019) [hereinafter SARs].

¹²² Individuals other than bank employees have duties to file SARs, including stockbrokers, insurance companies, and travel agencies. Steven Pelak, *Putting the 'Enforcement' into the Financial Crimes Enforcement Network*, HOLLAND & HART (Oct. 1, 2013), <https://www.hollandhart.com/putting-the-enforcement-into-the-financial-crimes-enforcement-network>.

¹²³ *Id.*

¹²⁴ A SAR must be filed if the transaction involves \$5,000 or more and the covered institution or business knows, suspects, or has reason to suspect that the transaction (or a pattern of transactions of which the transaction is a part) (1) involves illegal gains or an effort to evade federal law or regulation, (2) has no business or apparent lawful purpose or (3) is not the sort in which the particular customer would normally be expected to engage. *Id.*

¹²⁵ *What Is a Suspicious Activity Report?*, THOMSON REUTERS, <https://legal.thomsonreuters.com/en/insights/articles/what-is-a-suspicious-activity-report> (last visited Feb. 12, 2020).

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ Filing categories have expanded over time, with a modest impact on the nature of reports filed. For example, in April 2013, FinCEN introduced an electronic SAR filing that includes "elder financial exploitation" as a category, and such filings tripled in the following years. This is why our focus is on filing categories that have been available since the beginning of our sample period.

¹²⁹ *Id.*

behavior at their institution. Finalized SAR reports are sent to one of eight federal agencies—the Federal Reserve Board, the Internal Revenue Service, the Securities Exchange Commission, the OCC, the FDIC, the NCUA, and the FHFA.¹³⁰ When the alleged activity implicates financial crime, the SAR report may be sent to a fusion center, which makes the information available to state and federal agencies that may be interested in acting.¹³¹

There have been a few important changes in SAR reporting requirements in the past few decades. Most important, in 2002, the USA Patriot Act made SAR reporting requirements mandatory for broker dealers who suspect *any* violation of law or regulation, therefore subjecting broker dealers to a broader requirement than financial institutions.¹³² Immediately following the enactment of the Patriot Act, there was a spike in SAR report filing, even by banks who were subject to the same requirements (an earlier analysis of SAR reports shows that the spike eventually tapered off around 2010, just before our analysis begins).¹³³ A former Treasury official speculated that the acceleration in filing may have been the result of financial institution concern about reputational risk after 9/11.¹³⁴ Since 2002, however, SAR reporting requirements have been relatively stable.

We secured all available SAR enforcement data from the US Treasury Financial Crimes Enforcement Network.¹³⁵ The SAR data comprise both business-related and individual suspicious activity. To proxy for financial institution crime (rather than crimes that would not be attributed to the entity under respondeat superior), we isolate SARs referencing institutional insiders (employees, directors, agents, officers, and owning or controlling shareholders). The underlying data are reported monthly and exhibits a high degree of volatility; to aid with data visualization and interpretation, we perform one-sided winsoring at the 90% level and take a twelve-month moving average of the series.¹³⁶

Figure 5 demonstrates the increase in SARs filed across all eight agencies studied. We acknowledge that there is not a one-for-one relationship between SARs and underlying financial crime, however, we think that this data is a better proxy for violations than Bank Secrecy Act enforcement data. Measures of criminal enforcement—such as arrests and prosecutions—are dependent on factors like the ability to detect criminal behavior, the availability of admissible evidence, and agency resources. By contrast, bank employees are required to file SARs whenever they suspect that malfeasant behavior is occurring and therefore, the data collected is not subject to same endogeneity concern. Thus, while SARs may overstate the amount of crime (*i.e.*, contain

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² Bibb L. Strench et al., *Anti-Money Laundering Initiatives Under the USA Patriot Act*, FINDLAW, <https://corporate.findlaw.com/litigation-disputes/anti-money-laundering-initiatives-under-the-usa-patriot-act.html>.

¹³³ Aaron Klein & Kristofer Readling, *Acceleration in Suspicious Activity Reporting Warrants Another Look*, BIPARTISAN POLICY CTR. (Sept. 15, 2015), <https://bipartisanpolicy.org/blog/acceleration-in-suspicious-activity-reporting-warrants-another-look/>; FIN. CRIMES ENF'T NETWORK (FINCEN), *THE SAR ACTIVITY REVIEW – BY THE NUMBERS* (2013) [hereinafter *BTN*], https://www.fincen.gov/sites/default/files/sar_report/sar_by_num_18.pdf.

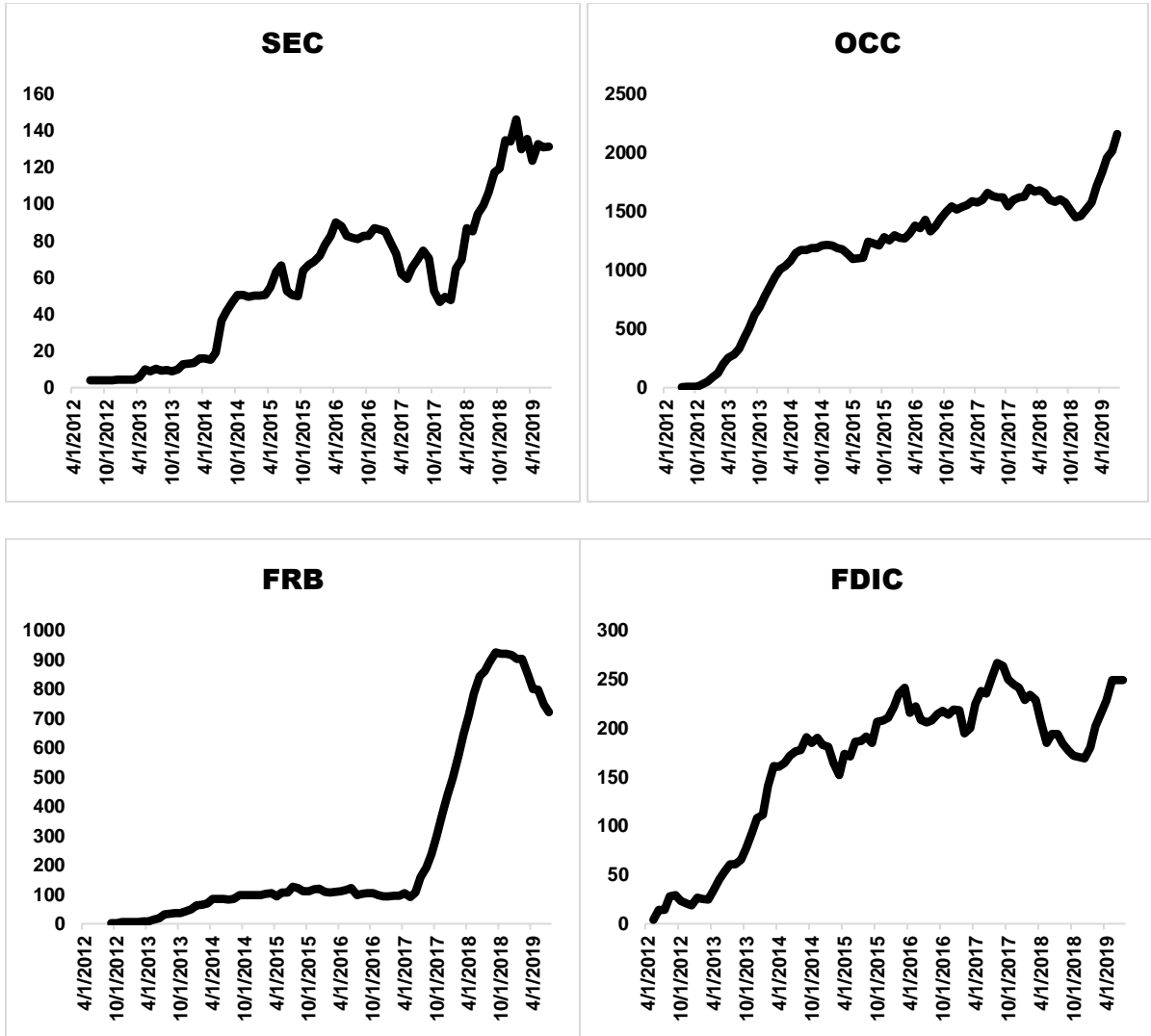
¹³⁴ JUAN C. ZARATE, *TREASURY'S WAR: THE UNLEASHING OF A NEW ERA OF FINANCIAL WARFARE* (PublicAffairs, 2013).

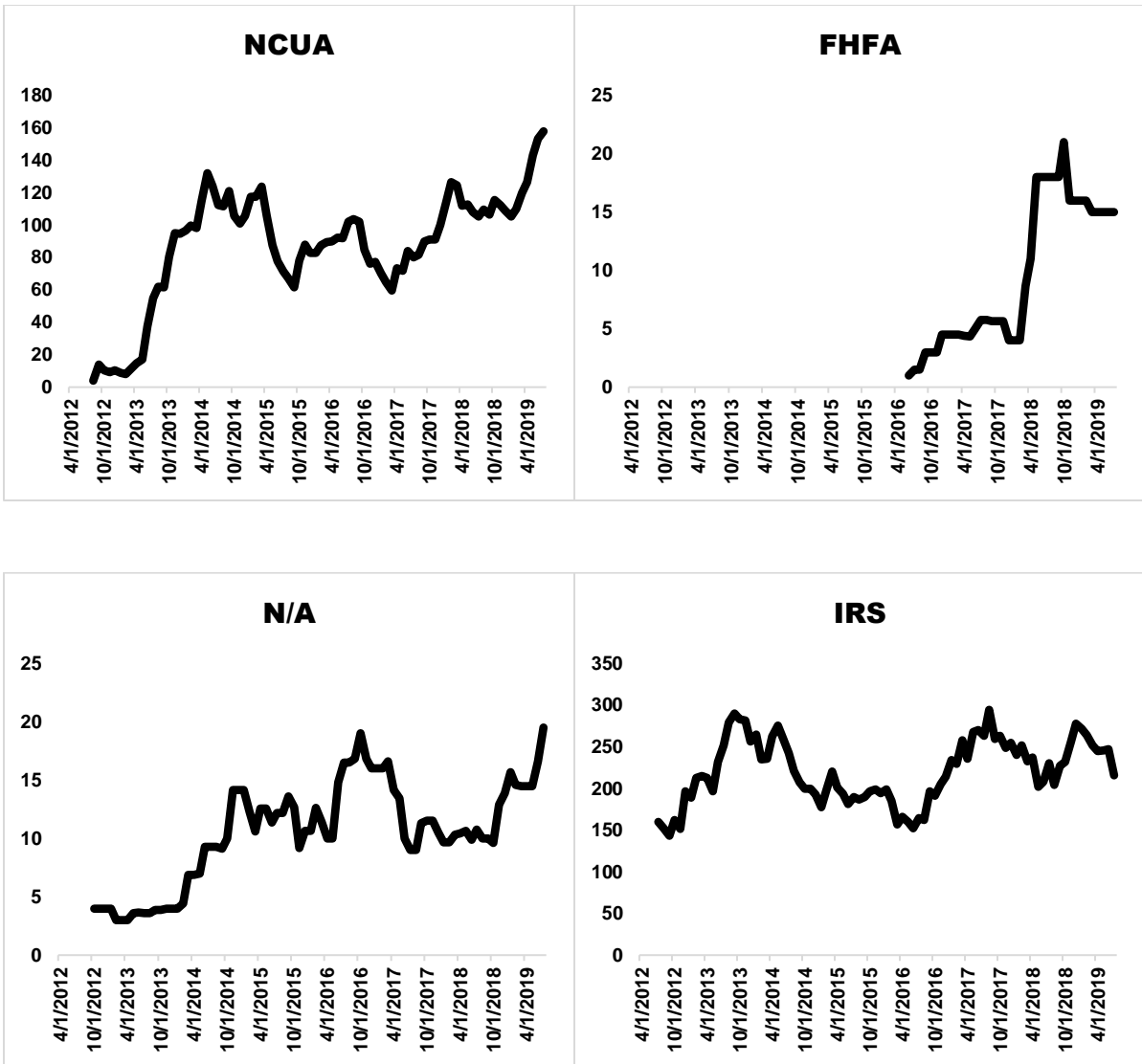
¹³⁵ Before 2012, SAR reports are not available electronically, and so we were not able to secure data before this date.

¹³⁶ Winsorizing the series excludes large outliers from the analysis, which can obfuscate trends. The use of a moving average also helps smooth the data series, as we analyze the observations by taking rolling means of twelve-month subsets of the full data series.

false positives) we doubt that they systematically and directionally err in reflecting the aggregate level of financial crime.

Figure 5: SAR Counts by Agency





It is important to highlight that SAR filings are not exogenous to the enforcement environment. The data highlight this directly: the 2001 Patriot Act did not change the reporting requirements for banks but instead expanded them to other entities. Yet, even for banks, there was a substantial uptick in SAR reporting. This uptick may have resulted from increased concern about bank reputation, or increased SAR filing enforcement by regulators. The uptick in reporting that we observe necessarily conflates both changes the *level* of criminal behavior and in the *reporting* of that behavior by financial institutions.

Two facts help us draw implications on trends in levels of crime from the reports that we study, despite this endogeneity concern. First, unlike the lax enforcement of the early 2000s, during the entire period of our sample, FinCEN took SAR filing seriously. Before 2005, FinCEN had not consistently pursued enforcement actions for the failure to file SARs; that changed in 2005 after

the agency prosecuted Riggs Bank criminally for the willful failure to file SARs.¹³⁷ Since that time, the agency has regularly brought enforcement actions against banks that fail to file SARs.¹³⁸ Second, although it is true that across agencies there has been a level shift upward in SAR reporting, it is not the case that these patterns are identical across agencies. Even within agency, trends in SAR filings differ across categories. In 2012, mortgage loan fraud reported by depository institutions decreased by 29 percent—after having risen each year since 1996. In that same year, banks saw increases in 12 of the 21 other suspicious activity categories.¹³⁹

A larger issue is that our results may be driven by heightened sensitivity from bank employees to the risk of enforcement following the financial crisis. In the wake of the financial crisis, banks were under intense scrutiny from regulators and politicians. This scrutiny would cause the rational bank employee to suspect that their behavior would be more likely to be subject to scrutiny by enforcement agencies. And this may lead to the rise in reporting (i.e., bank employees file SARs more frequently than they would have pre-crisis) that we observe.

However, if that was the only cause of the rise in SAR reports, we would expect to see an immediate increase after the crisis. We would also expect to see a reversion back to pre-crisis levels as we get further from 2008. That is not what we observe. In fact, in many categories, we do not see an uptick until 2014 (or later). Therefore, we do not believe that these trends are solely explained by concerns about the increased risk of enforcement.

B. CFPB Consumer Complaint Database

Under Dodd-Frank, the CFPB maintains a consumer complaint database that allows consumers to submit complaints about unfair, deceptive, or abusive acts or practices by financial services companies.¹⁴⁰ These complaints give the agency “insights into problems people are experiencing in the marketplace and help us regulate consumer financial products and services under existing federal consumer financial laws, enforce those laws judiciously, and educate and empower consumers to make informed financial decisions.”¹⁴¹ The CFPB also intends that the database will be used by researchers to use the data to identify harmful business practices that might harm consumers.¹⁴² The CFPB began accepting complaints regarding credit cards since its first day of operations in July 2011, and it has since expanded to several categories: mortgages, bank accounts

¹³⁷ Steven Pelak, *Putting the 'Enforcement' into the Financial Crimes Enforcement Network*, *supra* note 122.

¹³⁸ *Id.*; Alan M. Wolper & Frances Floriano Goins, *SEC Civil Penalty Against Charles Schwab Reflects New Trend in Enforcement of SAR Requirements*, LEXOLOGY (Aug. 9, 2018), <https://www.lexology.com/library/detail.aspx?g=350d2cd9-e2c4-47b8-b091-c25998e1b8fb>.

¹³⁹ SAR ACTIVITY REVIEW, *supra* note 133. It is again possible that the increase in enforcement that prompts extra SARs to be filed differs within each category. This seems less plausible, and certainly, in the immediate aftermath of the crisis, it is hard to imagine a category where enforcement would be higher than for mortgage loan fraud at banks.

¹⁴⁰ Consumer Complaint Database, *supra* note 34.

¹⁴¹ Consumer Complaint Entry, CONSUMER FIN. PROT. BUREAU, <https://www.consumerfinance.gov/complaint/> (last visited Jan. 2, 2020).

¹⁴² Richard Cordray, Director of the Consumer Fin. Prot. Bureau, Remarks at the Consumer Response Field Hearing (Mar. 28, 2013) (available at: <https://www.consumerfinance.gov/about-us/newsroom/prepared-remarks-of-director-richard-cordray-at-the-consumer-response-field-hearing/>); Ian Ayres et al., *Skeletons in the Database: An Early Analysis of the CFPD's Consumer Complaints*, 19 FORDHAM J. OF CORP. & FIN. L. 343, 347 (2014).

and services, private student loans, vehicle loans, other consumer loans, credit reporting complaints, and money transfers.¹⁴³

After receiving a consumer complaint, the agency confirms that the consumer is actually a client of the financial institution in question, that the complaint has not been filed already, and that the complaint was submitted by the consumer. However, the agency does not take steps to verify whether the complaint has merit. Complaints are forwarded to the appropriate company and/or regulatory agency, and the company has an opportunity to respond.¹⁴⁴

The CFPB database is distinct from SAR filings because these are *voluntary* reports made by consumers who believe themselves to be victims of crimes, rather than banks who believe they may be facilitating crimes. Thus, the endogeneity concern detailed above—that the increase in SAR reporting reflects changes in the enforcement regime—is irrelevant in this context. Instead, with respect to the CFPB database, the competing explanations for the uptick in consumer complaints we document is: (1) the increases in reporting are driven by greater financial crime; and (2) the increases in reporting are driven by changes in consumers’ likelihood of reporting that are independent of the underlying level of malfeasance. There is an additional concern that consumers reports are not appropriate proxies for corporate crime levels, as consumers can report annoyances (e.g., the late fee charged by my credit card company is high) as well as crimes (e.g., fraud, embezzlement). Indeed, the database does not distinguish between “major” and “minor” complaints, nor does it verify the accuracy of each complaint lodged before making it publicly available.¹⁴⁵

However, analysis of the CFPB complaints data suggest that a non-trivial amount of these complaints track misbehavior to some extent. Although the majority of complaints are closed by companies with an explanation, 17 percent are closed with some type of relief, including “monetary relief” or “non-monetary relief,” the latter of which includes changing account terms, correcting submissions to a credit bureau, or coming up with a foreclosure alternative.¹⁴⁶ Further, the anecdotal evidence supports the notion that there is relationship between the complaint database and financial crime. Between October 2016-December 2016, credit card complaints by customers of Wells Fargo increased by nearly 100 percent relative to the same period the year prior, an increase contemporaneous with its fake accounts scandal.¹⁴⁷

¹⁴³ CFPD Website Homepage, CONSUMER FIN. PROT. BUREAU, <https://www.consumerfinance.gov/> (last visited Feb. 12, 2020).

¹⁴⁴ Ayres, *supra* note 142, at 357. The company must respond within 15 days to be considered “timely.” *Id.*

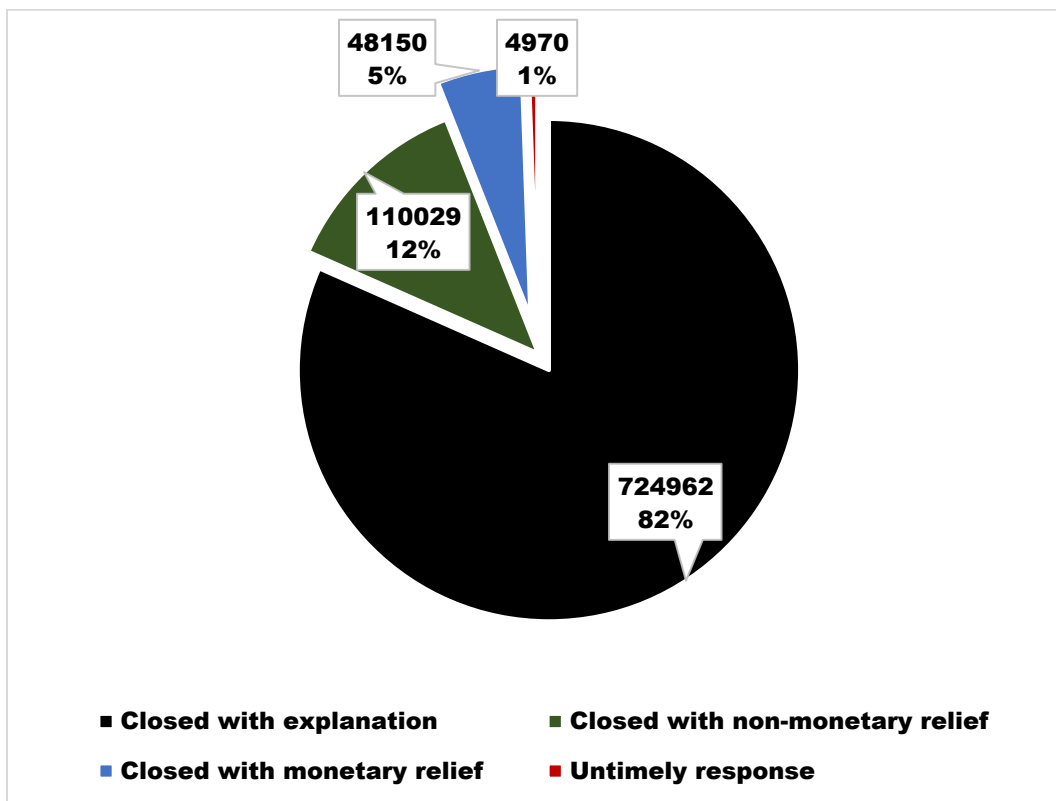
¹⁴⁵ *See id.* There are several categories of complaints that range in severity. For example, for credit card issuers, they include: billing disputes, identity theft, closing/cancelling accounts, interest rates, late fees, customer service, marketing, delinquent accounts, and credit determination. *Id.*

¹⁴⁶ Press Release, Consumer Fin. Prot. Bureau, CFPB Launches Consumer Complaint Database (June 19, 2012), <https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-launches-consumer-complaint-database/>. Note that 97% of complaints receive a response from the financial service provider. *Id.*

¹⁴⁷ Ashlee Kieler, *Complaints About Student Loan Servicing Increased 429% in Past Year*, CONSUMERIST (last updated Mar. 27, 2017), <https://www.consumerreports.org/consumerist/complaints-about-student-loan-servicing-increased-429-in-past-year/>.

Therefore, as with SARs, while we do not believe that there is a one-to-one correlation between the level of complaints filed and aggregate crime levels, we believe that they are a reasonable proxy for overall misconduct committed by consumer-facing financial institutions.¹⁴⁸

Figure 6: CFPB Resolved Complaints by Resolution Type (2014-2019)

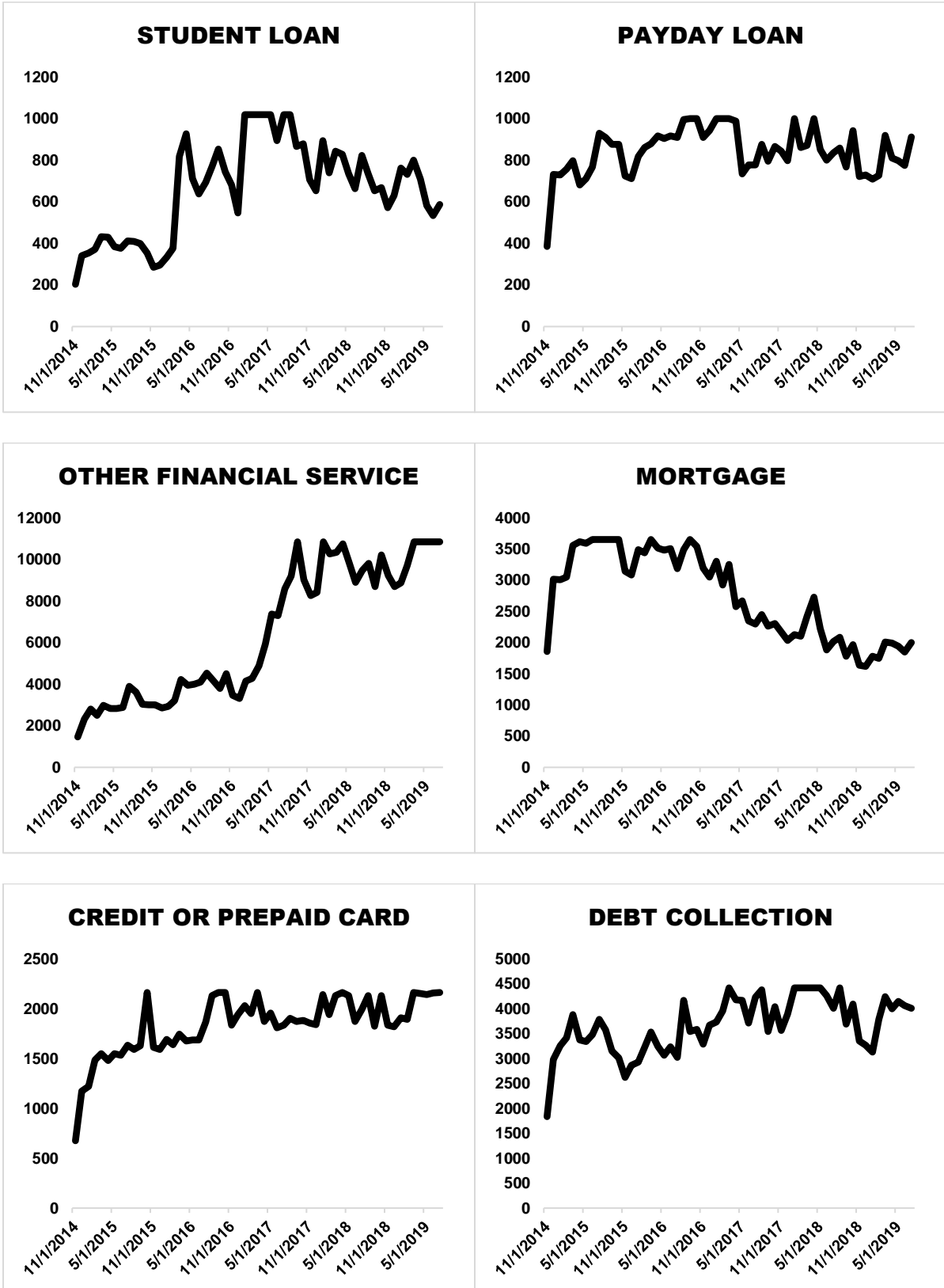


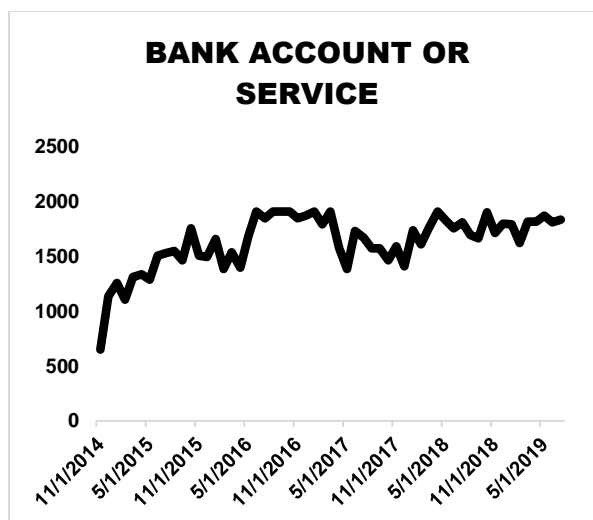
In Figure 7, we show the number of complaints by product type from January 2015 to July 2019. Again, to aid in visualization and interpretation, we performed one-sided winsoring of the data at the 90% threshold level.¹⁴⁹ These graphs reveal a steady increase in complaints by each product type, with the exception of mortgages.

¹⁴⁸ Federal law confers criminal jurisdiction over a variety of consumer financial protection matters, however, the CFPB lacks authority to bring criminal actions and is required to make criminal referrals to the Attorney General: “If the [CFPB] obtains evidence that any person, domestic or foreign, has engaged in conduct that may constitute a violation of Federal criminal law, the [CFPB] shall transmit such evidence to the Attorney General of the United States, who may institute criminal proceedings under appropriate law.” 12 U.S.C. § 5566. In furtherance of this goal, the DOJ and the CFPB have entered into a Memorandum of Understanding that details their partnership. See Memorandum of Understanding Between the Consumer Fin. Prot. Bureau and the U.S. Dep’t of Justice Regarding Fair Lending Coordination (Dec. 6, 2012) (available at: http://files.consumerfinance.gov/f/201212_cfpb_doj-fair-lending-mou.pdf); see also J.H. Jennifer Lee & John R. Marti, *Consumer Protection, the CFPB, and Prison: How Jail Sentences Arose Out of Civil Consumer Financial Protection Matters*, 31 ANTITRUST No. 3, Summer 2017, at 21. (2017), <https://www.dorsey.com/~/media/Files/Uploads/Images/Smmr17LeeC> (describing the framework of the MoU which “addresses information sharing, joint investigations and coordination, and referrals and notifications between the agencies”).

¹⁴⁹ See *supra* note 136 and accompanying text.

Figure 7: CFPB Complaints by Product Type





What to make of these results? It could be that the increase in complaints reflects consumer awareness of a new tool—the consumer complaint database—rather than a true increase in abusive or fraudulent practices by financial institutions. Although there certainly is some learning at play in the data, as evidenced by the large spike in the first two months of our dataset, we would expect uniform increases in complaint counts across all product types if this were the only operative effect. The steady *decrease* in mortgage complaints after 2016 suggests that the database may at least in part be picking up on something else.

Why do we observe a decrease in mortgage complaints? Several possibilities exist. The fall in mortgage complaints is consistent with increased scrutiny from the federal government about mortgage practices in the years following the financial crisis, as new regulations and regulatory oversight helped eliminate abusive practices.¹⁵⁰ This is not the only possible explanation—it could be attributable to a fall in mortgage delinquencies, for example¹⁵¹—but in any event, we think that it helps debunk the view that the increase in other types of complaints is solely attributable to an increase in consumer familiarity with the consumer complaint resource.

In related work, Kaveh Vastani, Hamed Namavari, and Jeffrey Shaffer study in greater detail the narratives that consumers report to the CFPB when they file complaints.¹⁵² They too document interesting shifts in topic popularity over time, which experience substantial volatility over their year-long sample. It is hard to see how shifts consumers' likelihood of reporting could drive these results. In fact, the authors suggest that regulators should do more to use the CFPB data to aid enforcement efforts, such as by applying machine learning techniques to consumer complaints to identify problems in consumer financial markets more quickly.

Further support for this view that our data are picking up on overall rates of illegal behavior comes from analyzing the raw student loan data shown in Figure 8. In late February 2016, CFPB

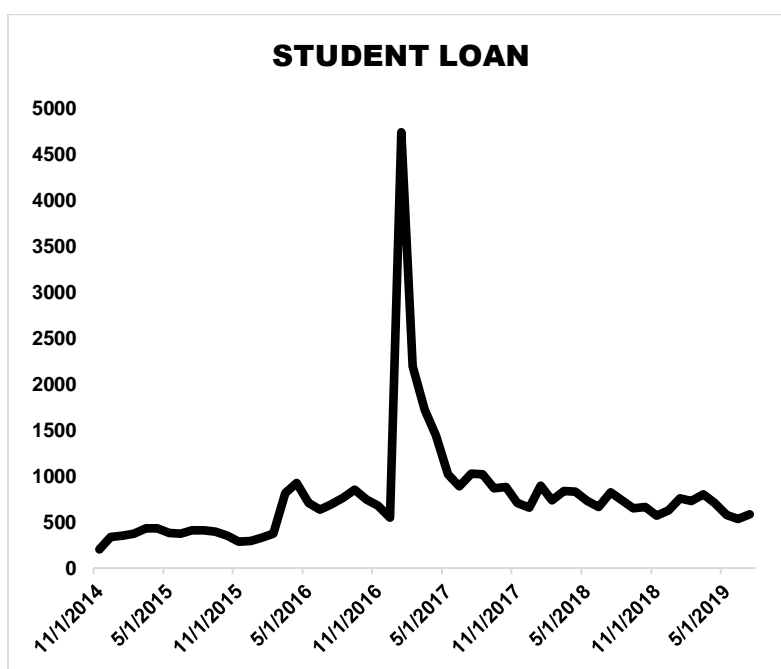
¹⁵⁰ See *supra* notes 37, 38 and accompanying text.

¹⁵¹ See Mortgage Delinquency Rate Trends, *supra* note 38.

¹⁵² Kaveh Bastani et al., *Latent Dirichlet Allocation (LDA) for Topic Modeling of the CFPB Consumer Complaints*, 127 EXPERT SYS. WITH APPLICATIONS 256 (2019), <https://www.sciencedirect.com/science/article/pii/S095741741930154X>.

updated its complaint form to capture information about federal student loan servicing, in addition to private student loan servicing.¹⁵³ That precipitated an immediate increase in the count of student loan complaints, suggesting that learning effects flow through relatively quickly. The large spike in early 2017, on the other hand, reflects the criminal behavior underlying the CFPB’s major enforcement action against Navient, the largest student loan company in the U.S., alleging illegal practices that thwarted borrowers’ ability to make accelerated repayments.¹⁵⁴ Again, the spike is immediate and short-lived. Taken together, these pieces of evidence suggest that learning about the existence of the consumer complaint database cannot be driving the increased traffic on the database across many categories of consumer financial products. To the extent that learning—about the database as a resource, about potential criminal behavior that a customer has been victim to—drives the decision to seek recourse, this occurs immediately.

Figure 8: Raw CFPB Complaints for the Student Loan Category



In sum, these two distinct data sources document a steady increase in complaints indicative of crime by financial institutions. Although we recognize that the limitations in our data do not allow us to say anything definitive, this evidence suggests that our enforcement regime, which in the past

¹⁵³ CONSUMER FIN. PROT. BUREAU, MIDYEAR UPDATE ON STUDENT LOAN COMPLAINTS: INCOME-DRIVEN REPAYMENT PLAN APPLICATION ISSUES (2016), https://files.consumerfinance.gov/f/documents/201608_cfpb_StudentLoanOmbudsmanMidYearReport.pdf.

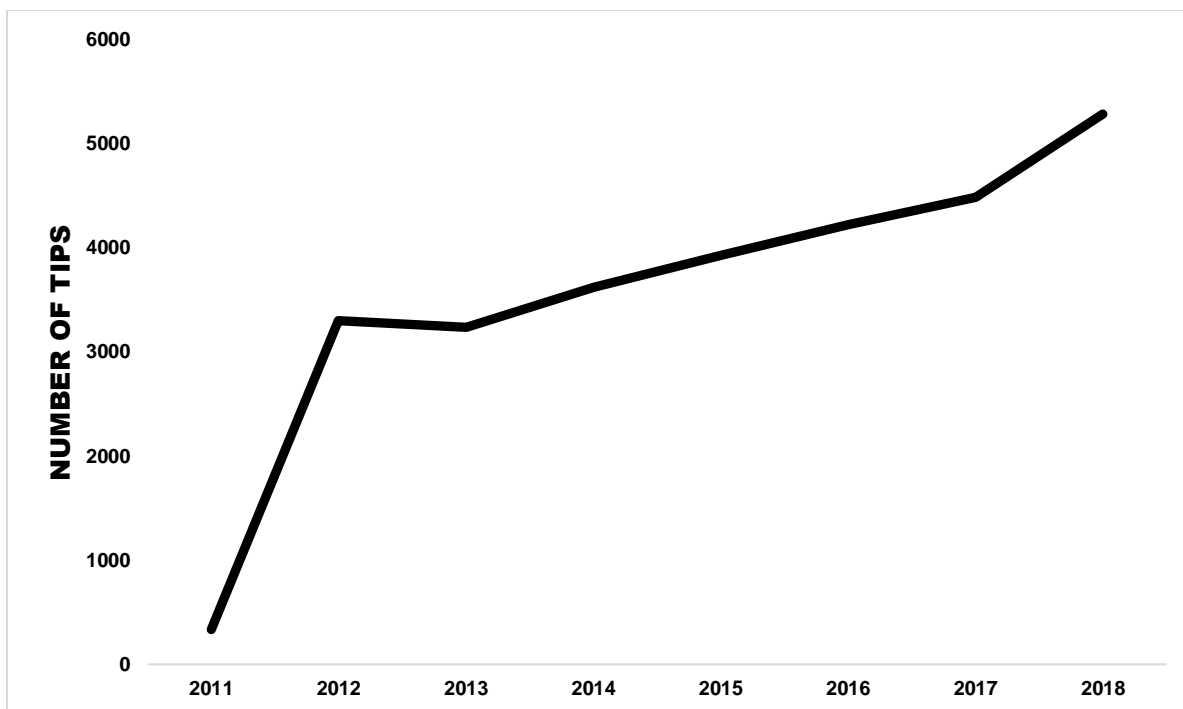
¹⁵⁴ Press Release, Consumer Fin. Prot. Bureau, CFPB Sues Nation's Largest Student Loan Company Navient for Failing Borrowers at Every Stage of Repayment (Jan. 18, 2017), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-sues-nations-largest-student-loan-company-navient-failing-borrowers-every-stage-repayment/>. The agency alleged that the company had violated the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Fair Credit Reporting Act, and the Fair Debt Collections Practices Act. *Id.*

decade has prioritized entity liability and fines over individual liability and jail time, is not deterring crime.

C. SEC Whistleblower Tips

Dodd-Frank amended the Securities and Exchange Act of 1934 to create Section 21F, which directs the SEC to make monetary awards available to individuals who provide original information that leads to successful enforcement actions against financial fraud.¹⁵⁵ To implement this program, the SEC created the Office of the Whistleblower.¹⁵⁶ The whistleblower program went into effect in 2011, and as Figure 9 reveals, the number of tips received has increased in every year since inception.¹⁵⁷ Most of these tips involve allegations about improper corporate disclosures and financial statements, offering fraud, or market manipulation.¹⁵⁸ Whistleblowers have also helped the Commission in bringing enforcement cases involving an array of securities violations, including offering frauds, such as Ponzi or Ponzi-like schemes, false or misleading statements in a company's offering memoranda or marketing materials, false pricing information, accounting violations, internal controls violations, and Foreign Corrupt Practices Act (FCPA) violations, among other types of misconduct.

Figure 9: SEC Whistleblower Tips Over Time



¹⁵⁵ 15 U.S.C. § 78u-6; *see* SEC, WHISTLEBLOWER PROGRAM, *supra* note 35, at 6.

¹⁵⁶ SEC Office of the Whistleblower, SEC, <https://www.sec.gov/whistleblower> (last updated Nov. 22, 2019).

¹⁵⁷ The fact that the program began in 2011 is likely why the number of tips was so much lower in that year than other years.

¹⁵⁸ SEC, WHISTLEBLOWER PROGRAM, *supra* note 35, at 23.

These data offer some support, albeit weak support, for the proposition that financial crime is on the rise. These tips are supposed to be filed whenever individuals observe violations of the law, and therefore, the more violations, the more tips we would expect to see. However, many factors could confound the results. As with the CFPB data, the increase could be due to heightened awareness of the program and the awards that successful whistleblowers can reap.¹⁵⁹ And as in previous two datasets, it is likely that the tips include false positives. Indeed, in light of the massive awards that are possible, the incentive to file an unsubstantiated whistleblower tip might be quite high (although there are also many negative consequences, such as isolation at work and job loss; indeed, most whistleblowers go to great lengths to report and attempt to resolve wrongdoing internally to avoid the negative repercussions that come from whistleblowing).¹⁶⁰ In sum, the most we can say is that the increased incidence of whistleblower tips offers additional support for our interpretation of the previous two datasets—that they indicate that financial crime is on the rise.

* * *

In the last several years, we observe an increase in financial institution crime, as evidenced by three distinct data sources: suspicious activity reports filed by financial institutions, CFPB complaints made by consumers across all financial products, and whistleblower tips reported to the SEC. It is true that these data are necessarily responsive to the enforcement regime. For SAR report data in particular, it is possible that we are capturing an increase in reporting because institutions are more carefully policed for their failure to comply with long-standing requirements after the financial crisis of 2008. Likewise, our CFPB data may be picking up on increased consumer awareness of a new resource, and whistleblowers may be responding to increased financial incentives for reporting criminal behavior. We understand there are reasons to believe that our results conflate levels of crime with an increase in incentives for reporting bad behavior, but we are confident that our results are at least partially explained by an uptick in underlying levels of criminality. Importantly, we observe volatility in each of our dataserries—levels of malfeasance ebb and flow over time in a way that is inconsistent with a one-time shock to reporting incentives.

The increase in crime is also consistent with what theory predicts would happen if enforcement progressed as it has in the past decade. In the wake of the financial crisis, only one guilty executive was sent to jail, and very few employees were prosecuted. In addition, enforcement against institutions was sporadic, and certain crimes—including violations of the Bank Secrecy Act—were ignored all together. Even Gary Becker would recognize that criminals weigh the individual benefits of crime against the costs of bad behavior. Once the costs of offending are lowered—because there are unlikely be any consequences from doing so—the benefits are more likely to outweigh them.

¹⁵⁹ Whistleblowers can receive 10% to 30% of any recovery in excess of \$1 million. § 78u-6(b)(1); SEC, WHISTLEBLOWER PROGRAM, *supra* note 35, at 6.

¹⁶⁰ *See, e.g.*, Anthony J. Casey & Anthony Niblett, *Self-Driving Laws*, 66 U. TORONTO L.J. 429 (2016), https://chicagounbound.uchicago.edu/journal_articles/8548/ (noting that a concern in the Dodd-Frank whistleblower program is the over-provision of tips because of the absence of a mechanism that imposes some cost on whistleblowers); Roomy Khan, *Whistleblower: Warrior, Saboteur or Snitch?*, FORBES (July 5, 2018, 1:03 PM), <https://www.forbes.com/sites/roomykhan/2018/07/05/whistleblower-warrior-saboteur-or-snitch/#676fa9b36362>.

Of course, the DOJ did secure a handful of large fines against financial institutions during the period we studied. Were these fines large enough to make up for sporadic enforcement? We doubt it. The next sub-section describes our study of corporate criminal recidivism and the evidence that supports our interpretation of the results.

D. Recidivism and Fines

We next study corporate recidivism, using public company enforcement data from Brandon Garrett. Garrett has studied recidivism by financial institutions, noting that federal prosecutors repeatedly settle criminal cases with the same banks over a short period. These financial institution recidivists include AIG (which was the subject of enforcement proceedings in 2004 and again in 2006), Barclays (2010, 2012, and 2015), Cr dit Suisse (2009 and 2014), HSBC (2011 and 2012), JP Morgan (2011, 2014, and 2015), Lloyds (2009 and 2014), the Royal Bank of Scotland (two in 2013 and 2015), UBS (2009, 2011, 2012, 2013, and 2015), and Wachovia (2010 and 2011).¹⁶¹ He suggests that this evidence of recidivism casts doubt that prosecutors take financial institution misconduct seriously, and that corporate penalties might not be sufficiently deterring corporate actors from engaging in crime.¹⁶²

We expand on this inquiry by studying recidivism by all publicly traded corporations over the last two decades, focusing on the relative size of the penalty for recidivist firms versus one-time offenders. We define a corporate recidivist to be a public company that is prosecuted more than once between 2001-2018. We begin with a list of 384 corporate prosecutions naming publicly traded corporate defendants. We identify any fines paid by the corporations, including restitution, forfeiture, disgorgement of profits, and other monetary penalties and payments to enforcers in parallel civil suits. We normalize fines by three measures of firm size—assets, revenue, and employee headcount—each of which is available from Compustat. Of the 384 prosecutions, we matched defendants from 372 to firms in Compustat. We were also able to match five prosecutions to public corporations not in Compustat; we pulled assets, revenue, and headcount data for these firms from SEC filings, via EDGAR.¹⁶³ Where possible, subsidiary firms were matched to parents, as long as the parent had acquired the subsidiary at the time of settlement. For international firms, annual assets, revenue, and headcount data were pulled from Compustat’s Global Daily database;¹⁶⁴ for U.S. listed firms, from Compustat’s North American Daily database.¹⁶⁵ As Compustat reports international data in local currencies, we converted size data to dollars using end-of-year conversion factors from FRED’s daily foreign exchange series.¹⁶⁶ International firms were queried via ISIN numbers; U.S. listed firms, via CUSIPs where possible and CIK numbers otherwise. All dollar figures were converted to 2018 dollars using the CPI series from FRED.

¹⁶¹ Garrett, *Declining Bank Prosecutions*, *supra* note 15 (manuscript at 42).

¹⁶² *Id.*

¹⁶³ EDGAR Company Filings Search, SEC, <https://www.sec.gov/edgar/searchedgar/companysearch.html> (last visited Jan. 2, 2020).

¹⁶⁴ Data from The Center for Research in Security Prices (CRSP) available from Wharton Research Data Services (available with subscription at: <https://wrds-web.wharton.upenn.edu/wrds/ds/crsp/index.cfm>).

¹⁶⁵ Data from Compustat North America available from Wharton Research Data Services (available with subscription at: <https://wrds-web.wharton.upenn.edu/wrds/ds/crsp/index.cfm>).

¹⁶⁶ U.S./Euro Exchange Rate, FED. RESERVE BANK OF ST. LOUIS, <https://fred.stlouisfed.org/series/DEXUSEU> (updated daily).

We maintain three different Boolean measures of procedural toughness. The first indicates whether an agreement required a corporate monitor; the second, periodic audits of compliance programs; and the third, either of the first two. In other words, we ensure that a company is not more likely to be a recidivist because the enforcement agency has greater knowledge about the company and its operations as a result of penalties secured in the first enforcement action. We observe in Table 1 that a recidivist is as likely to have a corporate monitor or audit imposed than a one-time offender, and in subsequent offenses, is actually less likely to have either imposed.

Table 1: Boolean Measures of Procedural Toughness

Offense Count	Fraction With:			Difference vs. One-Time Offenders		
	Monitors	Audits	Monitors or Audits	Monitors	Audits	Monitors or Audits
One-Time Offenders (N = 221)	19.00% (39.32%)	14.03% (34.81%)	27.15% (44.57%)	-	-	-
Recidivists (N = 51)	11.02% (31.44%)	9.45% (29.37%)	17.32% (37.99%)	-7.98% (7.28%)	-4.58% (7.14%)	-9.83%* (7.57%)
Recidivist First Offense (N = 51)	23.5% (42.84%)	9.8% (30.03%)	27.5% (45.07%)	4.52% (7.67%)	-4.22% (7.17%)	0.3% (7.73%)
Recidivist Second Offense (N = 51)	3.92% (19.60%)	7.84% (27.15%)	9.80% (30.03%)	-15.08%*** (6.46%)	-6.18% (7.00%)	-17.35%*** (7.24%)
Recidivist Third or Subsequent (N = 14)	0.00% (0.00%)	12.00% (33.17%)	12.00% (33.17%)	-19%*** (3.29%)	-2.03% (12.98%)	-15.15% (13.02%)

After normalizing fines, we construct a measure of recidivism to gauge whether the increase in fines operates as a deterrence mechanism. First, we sorted the resulting public corporation database by unique parent entity and date. For each firm, we manually cross-referenced prosecutions settled within one year of each other against filings provided by the Corporate Prosecution Registry (“CPR”); if multiple prosecutions in the CPR cited the same underlying malfeasance, we counted this as a single prosecution and summed the associated penalties. This procedure reduced the number of prosecutions from 372 to 348, implicating 272 parent entities. Of these, 221 were one-time offenders, and 51 (or 18.7%) were recidivists.

Table 2 summarizes the fines data and characteristics of recidivist and non-recidivist firms. Recidivists face larger penalties on average (\$256 million versus \$122 million for non-recidivists), but recidivist firms are also much larger than non-recidivist firms when measured by assets and revenue, as shown in Figures 9 and 10.¹⁶⁷

¹⁶⁷ Our results are therefore consistent with CLAYPOOL, *SOFT ON CORPORATE CRIME*, *supra* note 76, at 5 (“The biggest corporations get the most lenience. Out of the 38 repeat offender corporations identified, 36 are major corporations that are on or have appeared on the Forbes Global 2000 list of the world’s largest publicly traded corporations. Three of the corporations have held the top slot as the largest corporation in the world – JPMorgan Chase (2011 and 2010), General Electric (2009) and HSBC (2008). The two exceptions also were large, but not

Figure 9: Distribution of Non-Recidivist firms by Market Capitalization

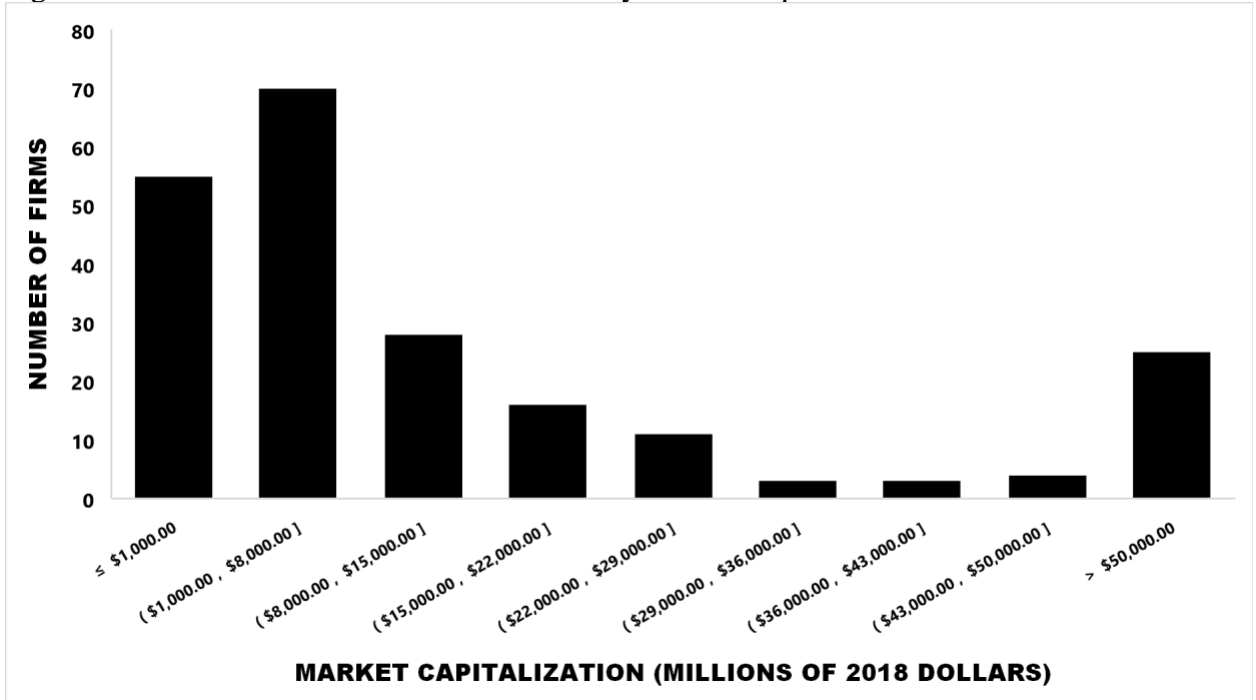
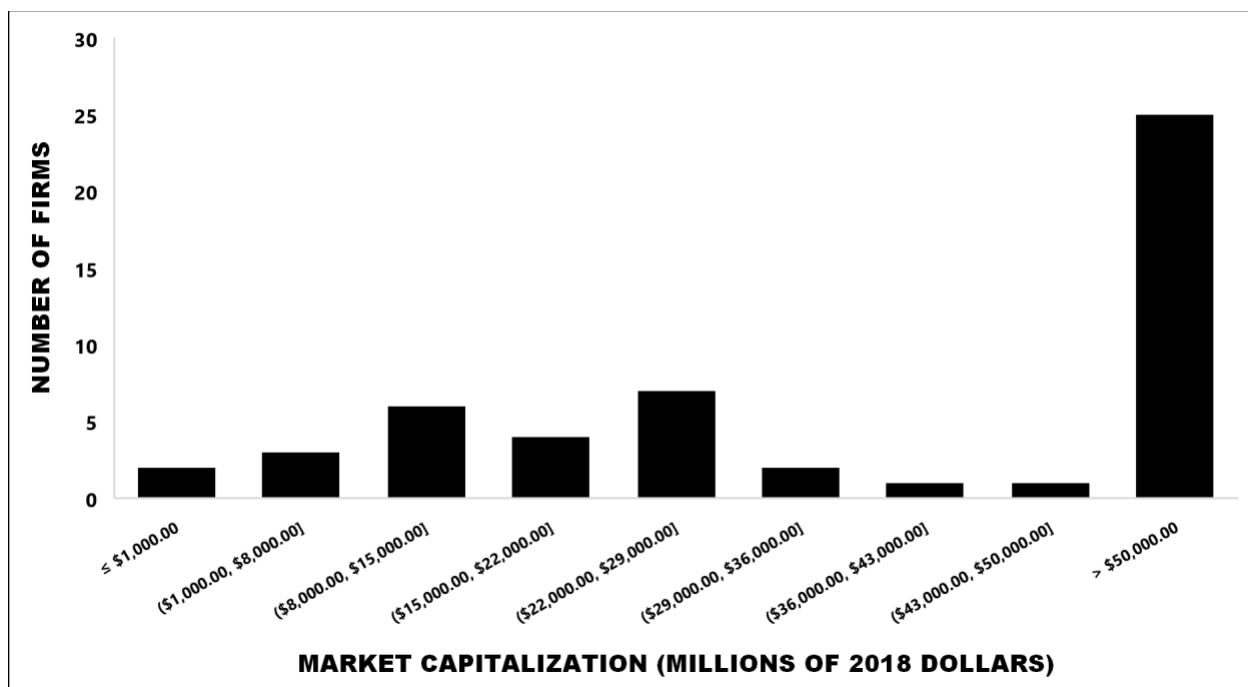


Figure 10: Distribution of Recidivist firms by Market Capitalization at First Offense

publicly traded. Most (25 out of 38) appear in the top 500 of the 2019 Fortune Global 500 list. Half of these repeat offender corporations (19 out of 38) are banks or financial corporations, and the majority of those (12) are headquartered internationally.”).



As a share of assets, revenue, and total employees, recidivists in fact face less stringent penalties (.22% of assets for recidivists, versus 16.84% of assets for one-time offenders, or approximately 1/80th the size; .55% of revenue for recidivists, versus 19.28% for one-time offenders, or approximately 1/35th the size; 19.28% of market capitalization for one-time offenders, versus .42% for recidivists, or approximately 1/40th the size). Therefore, although big public companies pay large fines, those fines are much smaller relative to the size of fines paid by smaller public companies. Of course, this could be because smaller public companies commit worse crimes, although we suspect that these crimes are not forty to eighty times worse. Instead, we believe that this suggests that an upper bound on corporate fines exist—it might not be politically feasible to levy a \$81 billion fine on Volkswagen (or 16% of the company’s assets), for example.¹⁶⁸ More importantly, it might not be legally permissible because fines are often limited by statute.¹⁶⁹

Table 3 shows the same data for recidivist public companies, by offense count. As one might expect, dollar fines increase with offense count; however, fines are *more lenient* (when measured as a percentage of assets or revenue) for second and subsequent offences than for first offenses. (As a percentage of market capitalization, fines are roughly the same for the first and

¹⁶⁸ Indeed, the DOJ secured only a \$2.8 billion fine in the wake of the company’s emission scandal. However, this fine was the largest criminal fine ever negotiated between and the U.S. government and an automaker. Paul A. Eisenstein, *Volkswagen Slapped With Largest Ever Fine for Automakers*, NBC NEWS (Apr. 21, 2017, 9:33 AM), <https://www.nbcnews.com/business/autos/judge-approves-largest-fine-u-s-history-volkswagen-n749406>.

¹⁶⁹ To take just one example, the FCPA sets the amount of entity-level fines for bribery to be \$2 million for each violation, but states that the maximum fine can be increased to \$25 million for willful violations.. 15 U.S.C. §78dd-1, §78ff; 15 U.S.C. §78ff(a); *see also* Cary Coglianese, *Bounded Evaluation: Cognition, Incoherence, and Regulatory Policy*, 54 STAN. L. REV. 1217 (2002).

second offenses, and smaller for the third). In other words, this evidence suggests that prosecutors treat recidivist firms more leniently than non-recidivists by levying lighter fines over time. What explains this behavior? Perhaps these later crimes are unrelated to the first, and the DOJ rightly believes that larger fines for later offenses would overdeter beneficial corporate activity. Another possibility is that criminal enforcement is a repeat game and the companies get better at negotiating for leniency the more times that they interact with prosecutors as defendants. Or, again, perhaps an upper bound exists (at least in the mind of prosecutors) that restricts the size of fines that can be levied on any one firm.

Table 2: Penalties and Measures of Firm Size for Public Corporations

	Penalty Size	Assets (billions)	Revenue (billions)	Market Cap (billions)	Employees	Penalty/Assets	Penalty/Revenue	Penalty/Market Cap	Penalty/Employee
One-Time Offenders (N = 221)	\$121,822,340 (281,613,530)	\$58.195 (204.222)	\$25.960 (69.513)	\$21.278 (43.451)	159,981 (1,613,137)	16.84% (187.91%)	19.28% (190.85%)	19.67% (119.03%)	\$11,745 (36,908)
Recidivists (N = 51)	\$256,300,279 (542,804,164)	\$587.689 (1,045.392)	\$62.768 (75.673)	\$90.338 (96.472)	95,835 (81,032)	0.22% (0.44%)	0.55% (0.90%)	0.42% (0.75%)	\$3,628 (7,633)

Table 3: Penalties and Measures of Firm Size for Recidivist Public Corporations by Offense Count

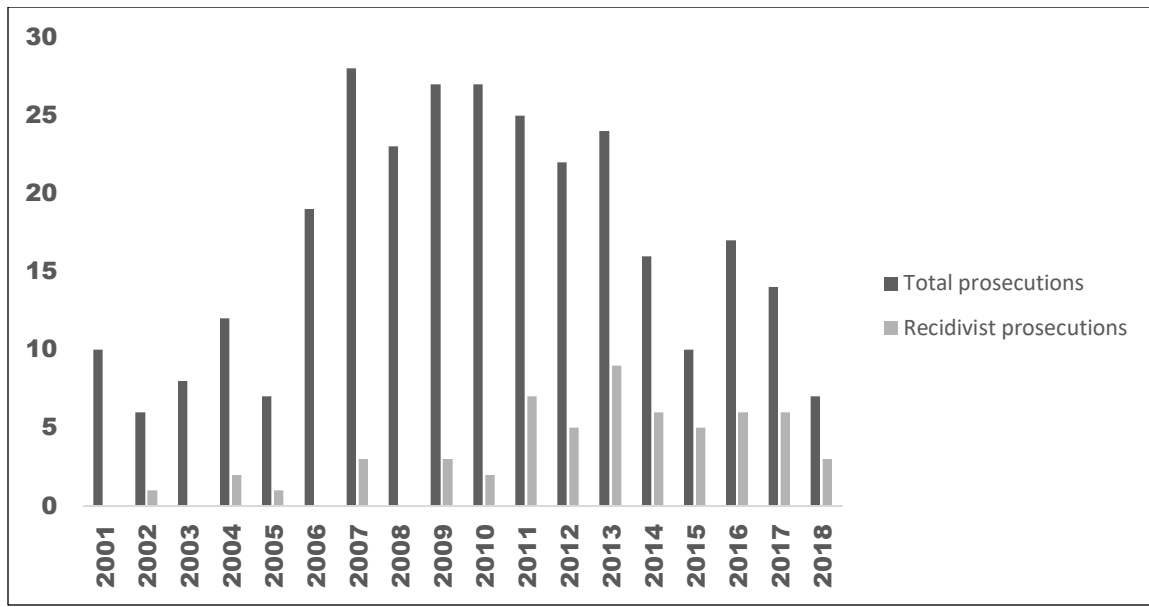
Offense Count	Penalty Size	Assets (billions)	Revenue (billions)	Market Cap (billions)	Employees	Penalty/Assets	Penalty/Revenue	Penalty/Market Cap	Penalty/Employee
First (N = 51)	\$222,574,165 (377,586,052)	\$578.783 \$(1,125.576)	\$60.498 \$(73.076)	\$85.674 \$(103.491)	93,952 (89,501)	0.28% (0.57%)	0.61% (0.95%)	0.42% (0.64%)	\$3,361 (5,568)
Second (N = 51)	\$224,049,474 (429,222,645)	\$524.653 \$(1,003.668)	\$57.176 \$(69.937)	\$82.903 \$(84.846)	90,641 (81,748)	0.18% (0.31%)	0.55% (0.93%)	0.46% (0.88%)	\$3,436 (7,441)
Third or Subsequent (N = 14)	\$390,893,194 (917,879,780)	\$734.450 \$(984.034)	\$78.808 \$(91.667)	\$114.722 \$(103.352)	110,270 (59,832)	0.14% (0.33%)	0.41% (0.74%)	0.35% (0.67%)	\$4,567 (11,173)

In sum, our study of public company recidivism indicates that there may be an upper bound on the size of the fine levied on any public company. Smaller public companies are subject to higher relative fines than their larger public company counterparts, and they are also less likely to offend again. By contrast, larger public companies are more likely to receive a small fine, and more likely to offend again, than smaller firms. Indeed, the largest firms in our sample were most likely to be subject to several enforcement actions during our sample period. Public Citizen reported in 2019 that of the 38 repeat offenders they were able to identify, 36 were on the Forbes 2000 list; and three had held the top spot as the largest corporation in the world.¹⁷⁰ Again, this could be because large firms have more opportunities to offend (more employees, more business activity) or have more difficulty policing their ranks. Or perhaps they are equally likely to offend but are more likely to be pursued by the DOJ when they do. The latter hypothesis is particularly compelling, as prosecutors likely garner more fame and attention from prosecutions against large companies. This reality likely contributes to our results, but the fact that relative fines are so much lower for large firms than smaller firms also suggests that the first penalty may not serve as a sufficient deterrent.

As additional support for that view, we observe an increase in recidivism between 2001 and 2018. In particular, as Figure 11 reveals, the share of crimes committed by recidivist companies jumps from 7% in 2010 to 28% in 2011 and continues to rise after that, hitting a high point of 50% in 2015. This means that a greater share of prosecutions involved companies that had offended before after the financial crisis than before. As Table 1 explains, this result is not explained by the presence of a corporate monitor or audit requirement in the first prosecution. In addition, although the growth of recidivism in the early years of our sample is not surprising—in 2002, for example, there were fewer years to commit crimes and be deemed a recidivist—the shift at the end of the sample is indicative of a real trend. Before 2010, the share of crimes committed by someone who committed a crime in any of the prior years was very low—only 7%. The next year, the share of recidivist crimes jumps up even as total crime falls. In sum, this indicates that there is an increase in recidivism in that year that is neither explained by enforcement nor our definition of recidivism. And that jump persists for the next six years, even as overall enforcement falls.

Figure 11: Number of Corporate Prosecutions and Recidivist Prosecutions

¹⁷⁰ We find more recidivists because our sample period is larger and also our matching of subsidiaries to parent firms potentially more precise. CLAYPOOL, *SOFT ON CORPORATE CRIME*, *supra* note 76, at 42.



In sum, corporate recidivism appears to be on the rise, even as the number of enforcement actions declines. And our results indicate a potential cause: recidivist penalties become more lenient over time. In addition, larger companies receive more lenient fines than smaller companies, and those larger companies are more likely to offend again. Our analysis therefore indicates that the use of fines by federal enforcers may be resulting in sub-optimal deterrence, especially for the largest companies.

IV. Implications

Part II shows that three proxies for crime by financial institutions indicate that financial crime is on the rise. This suggests that the DOJ's enforcement regime that privileges entity liability over individual liability, and high fines over jail time, is not adequately deterring crime by financial institutions. Of course, it is possible that rising crime levels would be consistent with an optimal deterrence regime. As discussed, the optimal level of crime is not zero, and perhaps there was too much deterrence (and too little crime) in the period before our sample. However, we do not think this is likely for a few reasons. For one, the 2008 financial crisis precedes our sample, and many commentators view lax regulatory oversight and policing of fraud and misconduct as a contributing factor to the global economic collapse.¹⁷¹ In other words, it is unlikely that the state was overdetering financial institution misconduct in the period preceding the financial crisis. Compounding this view is the evidence that, before 2008, prosecutions of banks were quite rare.

¹⁷¹ See, e.g., Maria Krambia-Kapardis, *Financial Crisis, Fraud, and Corruption*, in CORPORATE FRAUD AND CORRUPTION: A HOLISTIC APPROACH TO PREVENTING FINANCIAL CRISES 5, 5-38 (2016); NICHOLAS RYDER, *THE FINANCIAL CRISIS AND WHITE COLLAR CRIME: THE PERFECT STORM?* (2014); Henry Pontell et al., *Too Big to Fail, Too Powerful to Jail? On the Absence of Criminal Prosecutions After the 2008 Financial Meltdown*, 61 CRIME L. & SOC. CHANGE 1 (2014), <https://link.springer.com/article/10.1007/s10611-013-9476-4> (all describing fraud, corruption and corporate crime as contributing factors to national and global financial crises).

Indeed, from 2001-2007, the DOJ only brought thirty-four enforcement actions against financial institutions—most of which were settled.¹⁷²

We suspect that increasing crime levels indicate that the federal enforcement regime is not effectively deterring misconduct by financial institutions. And this is so despite the fact that financial institutions are increasingly penalized with large fines. Our results in Section IIID. provide a possible explanation as to why these fines may be inadequately deterring future incidents of misconduct. High fines adequately deter crime when they are set equal to the social cost of the crime, multiplied by the probability of detection.¹⁷³ But, this is not how fines are calculated. Not only that, the overall size of the fine is often subject to a ceiling¹⁷⁴, and our results confirm this reality: while smaller public companies bear fines that are a large percentage of their assets, revenue, and market capitalization, larger public companies bear fines that are approximately eighty times smaller on average. It is possible that optimal enforcement might be compromised by the political feasibility of levying massive fines that approximate the true cost of the organization's malfeasance. For example, massive fines ultimately penalize innocent shareholders, making enforcers wary to come down too hard on them.¹⁷⁵ In addition, enforcement agencies may be limited by statutes that cap the amount of fines that can be sought. And these limits—whether political or legal—mean that companies often view the prospect of offending as simply another cost of doing business—and a reasonable cost at that.

Not only that, law and economics scholars have underestimated the practical limits on the corporation's ability to adequately deter future incidents of crime.¹⁷⁶ As discussed, the law and economics literature favors entity-level fines because the corporation will often be a more efficient provider of detection and prevention efforts than the state.¹⁷⁷ In this case, when the entity bears a large fine, the individuals who bear it will induce the entity to implement the necessary reforms up to the appropriate level. For large public companies, those affected individuals are shareholders. In theory, shareholders of companies subjected to large fines should demand reforms of corporate practices consistent with law and economics theory. However, rationally apathetic shareholders might not recognize the problem nor understand how to address it.¹⁷⁸ Even if they did, highly diversified shareholders might not mind the penalty and may even prefer and reward fiduciaries

¹⁷² Brandon L. Garrett, *The Rise of Bank Prosecutions*, 126 YALE L.J. F. 33, app. A at 49-50 (2016) [hereinafter Garrett, *Rise of Bank Prosecutions*].

¹⁷³ See *supra* Part IIID.

¹⁷⁴ See *id.*

¹⁷⁵ See Rosenstein Remarks, *supra* note 90.

¹⁷⁶ Shavell and Polinsky provide the classic view, that “if firms are made strictly liable for their harms, they will design rewards and punishments for their employees that will lead employees to reduce the risk of harm, since firms will want to reduce their liability payments.” Polinsky & Shavell, *Should Employees be Subject to Fines?*, *supra* note 48, at 240.

¹⁷⁷ See Arlen, *Corporate Criminal Liability*, *supra* note 23.

¹⁷⁸ See generally ROBERT C. CLARK, CORPORATE LAW 390-92 (1986) (discussing rational apathy among shareholders); Bernard S. Black, *Shareholder Passivity Reexamined*, 89 MICH. L. REV. 520, 536-42 (1990). Of course, the modern corporation's shareholder base is largely comprised of institutional investors with large stakes in the underlying company. In theory, the presence of large and sophisticated investors could ameliorate our concerns, however, there is evidence that agency problems may compromise the efforts of even these investors. See Lucian A. Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy*, 119 COL. L. REV. (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3282794; Sean J. Griffith & Dorothy S. Lund, *Toward a Mission Statement for Mutual Funds in Shareholder Litigation*, 87 U. CHI. L. REV. (forthcoming 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3422910.

for engaging in misconduct: more risk means higher returns, and that benefit would likely outweigh the cost of the penalty imposed on a single firm in the portfolio from time to time.

In addition, the ultimate deterrent effect of fines against corporations and their shareholders may be muted by several factors. For example, although a company's stock price falls after the imposition of the penalty, it usually bounces back very quickly.¹⁷⁹ Therefore, shareholders might not demand an appropriate reduction in activity levels, nor the right amount of firm-wide monitoring, to avoid future instances of crime.¹⁸⁰

Indeed, the most important assumptions underlying the Beckerian framework—the framework that has influenced decades of scholarship as well as enforcement practice—often break down in the real world. As discussed, it might not be possible to estimate the “costs” of punishment like a prison sentence. The Beckerian response is grounded in economic principles: the costs of prison to the imprisoned are the discounted stream of cashflows that they would have earned outside of prison.¹⁸¹ We suspect that this answer strikes non-economists as misguided at best—it is unlikely that any incarcerated person would identify foregone earnings as the best measure of the cost of their prison term. It also leads to unjust outcomes: prison is more “costly” a punishment for white-collar criminals than their blue-collar counterparts because their foregone earnings are larger. Beyond these flaws, any attempt to measure foregone earnings as Becker would prescribe would be riddled with guesses and ultimately, errors. Relying on such a measure to calibrate enforcement, therefore, is problematic on multiple levels.

In addition, our data indicates that there is likely to be a larger deviation between the Beckerian optimal fine and the fine that is levied for large relative to small institutions. Small institutions are more likely to bear fines that are a larger percentage of their assets and revenue. For large institutions, fines sting like parking tickets, and this is indeed how they are described by the companies that bear them. Perversely, therefore, the U.S. enforcement regime is treating the largest institutions more leniently than smaller institutions, despite the fact that large institutions are more likely to commit crimes that result in widely felt public harm.

Whether we are relying on the right framework and set of assumptions to calibrate enforcement is a critically important question. The financial crisis of 2008 nearly brought down the global economy and cost the United States \$22 trillion.¹⁸² Measures of white collar crime in the U.S. estimate that it costs anywhere from \$426 billion to \$1.7 trillion annually.¹⁸³ In other words,

¹⁷⁹ Matthews, *supra* note 49.

¹⁸⁰ See Arlen & Kahan, *supra* note 16, at 326 (noting that shareholders are often not in the most effective position to reform corporate practices). It is true that the consequences of penalties may be larger than the direct financial costs suffered by the corporation. There are reputational harms associated with behavior that is tagged by enforcement agencies as meriting large-dollar fines. Consumers may distrust a corporation who is punished publicly for malfeasance, and choose to take their business elsewhere. But again, these harms will be primarily felt by shareholders. And our results indicate that fines plus these more amorphous consequences of any financial xpenalty are not sufficiently deterring financial crime.

¹⁸¹ See Becker, *supra* note 19, at 170.

¹⁸² See Regis Barnichon et al., *The Financial Crisis at 10: Will We Ever Recover?*, FED. RESERVE BANK OF S.F. (Aug. 13, 2018), <https://www.frbsf.org/economic-research/publications/economic-letter/2018/august/financial-crisis-at-10-years-will-we-ever-recover/>.

¹⁸³ J.C. HELMKAMP ET AL., NAT'L WHITE COLLAR CRIME CTR. TRAINING & RESEARCH INST., HOW MUCH DOES WHITE COLLAR CRIME COST? (2001), <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=167026>.

corporate crime affects all of us—as consumers of products, employees of companies, and investors who increasingly save for retirement via the stock market.¹⁸⁴ Critics of corporate criminal liability have focused too much on the harm to shareholders when corporations are forced to pay fines,¹⁸⁵ and too little on the harm to the entire economy when corporate crime is not effectively deterred.¹⁸⁶

However, we recognize that we cannot answer the ultimate normative question with our data alone, which primarily focus on crime by financial institutions. Therefore, our primary recommendation is to urge the government to do what it does for all other types of crime and study corporate crime levels, or at least, supply additional data for researchers to use. In other words, we argue that it is time to abandon an enforcement system guided by law and economics theory, and move to a system informed by data. This would enable a better understanding of what aspects of the federal enforcement regime are failing, and where additional attention and resources should be directed.

Data on non-white collar crime provide a hint of where to begin. National Incident Based-Reports are used by law enforcement agencies for collecting and reporting data on crimes.¹⁸⁷ They are primarily used by local and state law enforcement agencies monitoring “street crime,” and the data reflects these preferences.¹⁸⁸ The white-collar criminal reporting data are quite limited, and was last collected in 1983.¹⁸⁹ More helpful are data collected by Brandon Garrett, which compiles information about corporate enforcement at the federal level. These data have aided the efforts of many researchers seeking to better understand corporate criminal enforcement, including our own. But Professor Garrett acknowledges that from his data we can only extrapolate a rough guess of overall crime rates.

We recognize that estimating crime levels is a daunting task, but we believe that it is one that government agencies could tackle. Most ambitiously, the government could produce and make available to the public and researchers a comprehensive registry of corporate malfeasance, as it does for other types of crime. But there are intermediate steps that could help internal and outside researchers evaluate the efficacy of enforcement. For one, it would be useful for the government to track and make publicly available incidences of corporate crime that prosecutors are suspicious occurred, but choose not to pursue through enforcement actions. Data on leniency programs, such as the program run by the Antitrust Division of the DOJ, which allows corporations and individuals who self-report bad behavior to avoid criminal conviction, would also provide useful information. Finally, the government could release data detailing the claims reported by corporate whistleblowers. Although anonymity for individuals and firms contributes to the willingness to self-report, the choice of anonymity over data access has significant consequences for our understanding of the landscape of corporate crime. The tradeoffs should be weighed carefully.

¹⁸⁴ WILLIAM A. BIRDTHISTLE, *EMPIRE OF THE FUND: THE WAY WE SAVE NOW* (2016).

¹⁸⁵ *See, e.g.*, GIBSON DUNN UPDATE, *supra* note 91 (“Overly harsh penalties against the corporate entity will merely incentivize its best professionals to jump ship, while innocent shareholders and local communities are left holding the bag as the company is destroyed or permanently crippled.”).

¹⁸⁶ *See supra* notes 2-14 and accompanying text.

¹⁸⁷ CYNTHIA BARNETT, U.S. DEP’T OF JUST., *THE MEASUREMENT OF WHITE-COLLAR CRIME USING UNIFORM CRIME REPORTING (UCR) DATA 2* (2000), https://ucr.fbi.gov/nibrs/nibrs_wcc.pdf.

¹⁸⁸ *Id.* at 6.

¹⁸⁹ *Id.* at 2; *see* MANSON, *supra* note 27.

We also offer suggestions for academics studying this question with the limited data that exist. For one, exogenous shocks to corporate crime regimes provide an opportunity to study how legal regime change alters corporate behavior. Several studies have relied on shocks to study corporate compliance (e.g., following Arthur Andersen’s demise, which forced corporations to change auditors¹⁹⁰) and insider trading.¹⁹¹ Future work could follow a similar approach to study changes in criminal enforcement. Making use of exogenous shifts in legal environment and tracing out their impact on reported crime will not paint a full picture of corporate crime levels, but they can help provide micro-level evidence on the pervasiveness of corporate crime, as well as the consequences for corporate institutions of our under (or over) deterring it.

Beyond exploiting exogenous shifts to trace out causal relationships between legal institutions and crime levels, researchers can be creative about aggregating data from a variety of sources to draw inferences about corporate criminal behavior. In this Article, we have reported data from surveys of corporate crime incidence, complaints of corporate customers, self-reporting on malfeasance by firms, and government data on corporate prosecutions. And this is just the tip of the iceberg. There is much more that could be done, for example by working with individual firms to acquire proprietary data about internal employee malfeasance.

For too long, scholars have been hamstrung by a belief that it is impossible to develop a measure of corporate crime, and so have been discouraged from an inquiry like ours. And we do not intend to minimize the challenging nature of this task. Our hope is to encourage others to engage with the messiness of the data that exists—and to push for new data sources made available by private and public actors—so that we can attempt to measure the level of criminal behavior by corporate actors, and how it responds to evolving legal regimes.

And if these studies confirm our results that financial crime is on the rise, the answer would seem to be clear: an enforcement regime that is limited in its ability to levy fines at an optimal level must rely on other forms of punishment to increase deterrence. Not only that, for widely held public companies, even massive fines may not have the intended effect if shareholders are unlikely to demand the necessary reforms. Therefore, enforcement agencies may need to move away from fines as the sole means of achieving optimal deterrence. With that in mind, we offer a few suggestions for policy reform that could strengthen the impact of any given criminal penalty.

As a threshold matter, we recognize that enforcement agencies are resource constrained and are unable to pursue charges in every instance of corporate misconduct. Therefore, we understand that enforcement agencies might be limited in the number of charges that they can bring, and the number of cases that they can take to trial. That being said, there are a range of actions that enforcement agencies can take to increase the deterrence punch of any criminal penalty. First, the DOJ could take steps to try and minimize the risk of future crime by the organization, perhaps by seeking governance reforms or even imposing a corporate monitor. At one point in time, these sorts of arrangements were popular with the DOJ, but they have recently gone out of favor with

¹⁹⁰ Dyck, *supra* note 33.

¹⁹¹ Diane Del Guercio, et al., *The Deterrence Effect of SEC Enforcement Intensity on Illegal Insider Trading: Evidence From Run-up Before News Events*, 60 J. L. & ECON. 269 (2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1784528.

the agency.¹⁹² However, other enforcers continue to make good use of them. Consider the Federal Reserve's historic settlement with Wells Fargo in the aftermath of its fraudulent account scandal. Wells Fargo was disallowed from growth until it agreed to improve its governance and controls, which included replacing four members of its Board who failed in their supervisory roles.¹⁹³ This punishment was lauded as appropriately severe: a rare case when the central bank chose to impose strict limits on a major bank's growth, and where prosecution resulted in direct consequences for the bank's leadership.¹⁹⁴

In addition, the DOJ could find additional ways to increase the severity of criminal punishment (aside from levying higher fines), thereby enhancing both general and specific deterrence. We address two possibilities: using shaming mechanisms and seeking penalties against guilty individuals.

First, enforcement agencies could more aggressively shame entities that commit crime. This has been a popular suggestion among academics for several decades,¹⁹⁵ and we occasionally see enforcement agencies embracing such policies—recall that PG&E was required to advertise its criminality.¹⁹⁶ For corporate executives, the prospect of public shame—even at the entity level—is likely a powerful deterrent.¹⁹⁷ Shaming mechanisms that target the corporation can affect consumers of products made by the offending firm, which may affect the company's bottom line. In addition, shaming mechanisms may have an impact on the company's investors. Indeed, shareholders are increasingly looking to invest in companies that share their values;¹⁹⁸ for that reason, advertising that the company is a criminal may have a greater effect today than ever before. Therefore, shaming mechanisms may chill investors from purchasing equity or debt from the criminal entity, increasing the company's cost of capital. One qualification, however, is that

¹⁹²See Samuel Rubinfeld, *U.S. to Reduce Use of Monitors in Corporate Settlements*, WALL ST. J.: RISK & COMPLIANCE J. (Oct. 15, 2018 4:12 PM), <https://blogs.wsj.com/riskandcompliance/2018/10/15/u-s-to-reduce-use-of-monitors-in-corporate-settlements/>. Largely descriptive work exists on the potential importance of corporate monitorships, but relatively little exists by way of measuring the extent to which monitors deter future criminal behavior. See, e.g., Veronica Root, *Modern-Day Monitorships*, 33 YALE J. ON REG. 110 (2016), <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1482&context=yjreg>; Khanna, *The Corporate Monitor*, *supra* note 79. Our perusal of the data on corporate settlements indicates that the presence of a monitor is not deterring future malfeasance; future work should take a closer look at whether and how the presence of a corporate monitor enhances deterrence.

¹⁹³ Flitter et al. 2018.

¹⁹⁴ *Id.*

¹⁹⁵ See David A. Skeel Jr., *Shaming in Corporate Law*, 149 U. PA. L. REV. 1811 (2001), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=2181&context=faculty_scholarship; Jayne W. Barnard, *Reintegrative Shaming in Corporate Sentencing*, 72 S. CAL. L. REV. 959 (1999); BRENT FISSE & JOHN BRAITHWAIE, *THE IMPACT OF PUBLICITY ON CORPORATE OFFENDERS* (SUNY Press, 1983). *But see* V.S. Khanna, *Corporate Criminal Liability: What Purpose Does It Serve?*, *supra* note 55, at 1503 (1996) (pointing out that reputational penalties create social costs).

¹⁹⁶ See PG&E Press Release, *supra* note 1.

¹⁹⁷ See FISSE & BRAITHWAITE, *supra* note 195. Shaming mechanisms for guilty white-collar criminals are not currently allowed under the Sentencing Guidelines, and some have advocated for their use. See Daniel M. Kahan & Eric A. Posner, *Shaming White-Collar Criminals: A Proposal for Reform of the Federal Sentencing Guidelines*, 42 J. L. & Econ. 365 (1999).

¹⁹⁸ See, e.g., Annual Letter from Larry Fink, CEO, BlackRock, to CEOs, A Fundamental Reshaping of Finance (Jan. 2020) (available at: <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>); Emile Hallez, *BofA Starts Selling Benefits Packages to Corporate Banking Customers*, INVESTMENTNEWS (Feb. 12, 2020), <https://www.investmentnews.com/article/20190712/FREE/190719972>.

shaming mechanisms may be less effective in the context of financial institution defendants. Financial relationships are sticky, and thus the consequences of reputational harm are likely to be less severe in this setting than in others.¹⁹⁹

A second way to increase the severity of punishment would be to charge guilty individuals.²⁰⁰ While this approach appears extreme, it has many advantages. In particular, it would ensure that there is no disconnect between the recipient of the punishment and the bad actor, increasing the likelihood of both general and specific deterrence.²⁰¹ But critics of individual liability would likely point out that is very difficult and expensive for enforcement agencies to prosecute individuals. Often, in the wake of a corporate scandal, it is challenging to determine who was responsible for the crime. Corporate decisionmaking is often diffuse, made by many different actors at different levels, which makes it difficult to hold any individual responsible beyond a reasonable doubt.²⁰² Not only that, it can be difficult to distinguish beneficial corporate risk taking from intentional criminal activity.²⁰³ And often, the only ties that can be clearly drawn between individuals and malfeasance are of low-level employees, rather than those executives who create cultures that foster criminality. This is why the only investment banker in the U.S. to go to jail following the crisis was a mid-level executive.²⁰⁴ Drawing a line between criminal behavior encouraged by a problematic corporate culture and top executives is often impossible, and so additional individual-level prosecutions alone, without finding a way to ascribe indirect liability to those at the top, is likely to fall hardest on regular employees who follow orders, rather than top brass leadership who make them.²⁰⁵ As another illustration of this reality, consider the following: former Wells Fargo CEO John Stumpf testified in September 2016 to the Senate about how the firm rapidly responded to the fake accounts scandal by noting that 5,300 low-level bankers and tellers had been fired for

¹⁹⁹ Cf. Matt Egan, *Wells Fargo Customers Are Fed Up. They Could Yank Billions of Dollars in Deposits*, CNN BUS. (Oct. 10, 2018, 2:34 PM), <https://www.cnn.com/2018/10/10/business/wells-fargo-bank-customers-scandal/index.html>. However, there are few corporate scandals that rise to the level of Wells Fargo's fake accounts. In general, banking relationships are extremely sticky. Mark J. Flannery & Christopher M. James, *Market Evidence on the Effective Maturity of Bank Assets and Liabilities*, 16 J. MONEY, CREDIT & BANKING 435 (1984), https://www.jstor.org/stable/1992182?seq=1#metadata_info_tab_contents.

²⁰⁰ For a forceful argument in favor of jail time for guilty individuals, see Rena Steinzor, *WHY NOT JAIL?: INDUSTRIAL CATASTROPHES, CORPORATE MALFEASANCE, AND GOVERNMENT INACTION* (Cambridge Univ. Press, 2014).

²⁰¹ Kelli D. Tomlinson, *An Examination of Deterrence Theory: Where Do We Stand?*, 80 FED. PROB. 33 (2016), https://www.uscourts.gov/sites/default/files/80_3_4_0.pdf; see also Honorable Jed Rakoff, U.S. Dist. Judge, S. Dist. of N.Y., Address at the NYU School of Law Conference on Corporate Crime and Financial Misdealing (Apr. 17, 2015) (video of event available at: <https://www.youtube.com/watch?v=fw8Y2hqyOrk>) (“What I fear most is not going after the people who done it. That’s important for deterrence purposes. It’s important for accountability purposes. It avoids all of the difficult questions when you just go after the corporation — are you hurting the shareholders, who are, in most cases, totally innocent? How much are you really achieving? What is the deterrent effect? How much can you change corporate culture? All of those questions seem to me to be quite secondary to the approach of prosecuting the people who actually committed the crime.”).

²⁰² SAMUEL BUELL, *CAPITAL OFFENSES: BUSINESS CRIME AND PUNISHMENT IN AMERICA'S CORPORATE AGE* xv (2016) (discussing diffusion of responsibility within an organization as one of several difficulties in corporate liability).

²⁰³ *Id.*

²⁰⁴ Jesse Eisinger, *The Fall Guy*, NY TIMES MAG., Apr. 30, 2014, at 34 [hereinafter Eisinger, *Fall Guy*], <https://www.nytimes.com/2014/05/04/magazine/only-one-top-banker-jail-financial-crisis.html>.

²⁰⁵ The reality that low-level employees often take the brunt of criminal investigations is unfortunate for another reason: it makes it much more difficult for companies to manage compliance and may discourage reporting.

their actions since 2011.²⁰⁶ His resignation came only a month later and was a response to missteps before the Senate during this testimony, rather than accountability for the scandal directly.²⁰⁷

With these issues in ascribing liability to top executives and proving charges, prosecutors may be wary to pursue individuals. Indeed, it is far easier to secure a high-profile win by settling with the entity. In that moment, the entity's management may even be in cahoots with the prosecutors: the agency secures a large fine, and the guilty individuals avoid the risk of personal liability.

If it is currently too difficult and expensive for agencies to prosecute high-level individuals, then it might be helpful to reform the criminal justice system to increase the likelihood of a win when individuals are charged. The fact that the Yates memo had no real effect on enforcement activity demonstrates that something more is necessary than a policy shift from the top.²⁰⁸ Along these lines, Senator Warren has introduced a bill that would authorize prosecution of an executive officer of any corporation that generates more than \$1 billion in annual revenue for negligently permitting or failing to prevent a criminal or civil violation by the company that affects “the health, safety, finances, or personal data” of more than one percent of the population.²⁰⁹ Put simply, Senator Warren wants to enable prosecutors to hold *negligent* corporate executives *criminally* responsible for corporate crimes that affect a large number of people.²¹⁰

This is a controversial proposal. A bedrock of our criminal justice system is that an individual who acts without mens rea is not liable under criminal law—indeed, criminal justice reformers have focused on increasing the burden on prosecutors to prove a defendant's guilty mental state.²¹¹ The Warren proposal would replace requisite intent with a much lower standard, requiring only that a corporate executive be negligent. The benefit is that doing so could entice federal prosecutors to pursue high-level individuals by easing the prospect of a victory. However, concerns about overdeterrence abound—qualified executives may avoid beneficial risk taking or even refuse to work for large companies to avoid the risk of penalties for negligent action. Or, they might do

²⁰⁶ John Stumpf, Chairman & CEO of Wells Fargo, Testimony Before the U.S. Senate Committee on Banking, Housing and Urban Affairs (Sept. 20, 2016) (transcript available at: <https://www.nytimes.com/interactive/2016/09/19/business/dealbook/document-wells-fargo-stumpf-prepared-testimony.html>).

²⁰⁷ Matt Egan et al., *Wells Fargo CEO John Stumpf Is Out*, CNN (Oct. 12, 2016, 7:31 PM), <https://money.cnn.com/2016/10/12/investing/wells-fargo-ceo-john-stumpf-retires/index.html>.

²⁰⁸ See *supra* notes 87-90 and accompanying text.

²⁰⁹ Anello, *supra* note 14.

²¹⁰ Senator Warren also proposed the “Ending Too Big to Jail Act,” which would have focused enforcement resources on financial institutions in three main ways (the bill was proposed in March 2018 and died in committee). First, the bill would have created a permanent law enforcement agency within the Treasury Department charged with investigating financial institution fraud. Second, the bill would have required certain financial institution executives to certify that the institution had not committed criminal conduct or civil fraud. And third, the bill would have required courts to make a determination that DPAs are in the public interest before allowing them to go forward. See Lev L. Dassin et al., *Bill Proposal—Corporate Executives Criminally Accountable for Negligent Conduct*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Apr. 18, 2019), <https://corpgov.law.harvard.edu/2019/04/18/bill-proposal-corporate-executives-criminally-accountable-for-negligent-conduct/>.

²¹¹ Benjamin Levin, *Mens Rea Reform and Its Discontents*, 109 J. OF CRIM. L. & CRIMINOL. 491 (2019); see also GENE HEALY, GO DIRECTLY TO JAIL: THE CRIMINALIZATION OF ALMOST EVERYTHING 65 (2004) (arguing for the abolishment of strict liability, which dispenses with the mens rea requirement, because it is “completely inconsistent with the Anglo-American tradition”).

more to cover their tracks.²¹² The issue is that we do not necessarily want to punish negligent action criminally, but only willful and knowing misconduct or even recklessness; however, such cases are harder for prosecutors to prove.²¹³ On balance, therefore, reform of this kind would help ensure that high-level individuals are held responsible for corporate action that results in grave social harm.²¹⁴

Of course, easing the prospect of individual criminal liability might not be necessary if other mechanisms existed to hold bad actors (or the people who facilitate and encourage their misconduct) accountable. Accordingly, legislators could enact civil penalties for guilty executives who preside over agents who commit crimes. Take FDIC Rule 380.7 as an example, which was adopted as part of Dodd-Frank.²¹⁵ Under that rule, the FDIC can claw back up to two years of compensation from current and former senior executives and directors who are found “substantially responsible” for the failure of a financial institution.²¹⁶ The rule also adopts a presumption of responsibility if the manager had responsibility for the “strategic, policymaking or company-wide operational decisions of the covered financial company,” which includes the CEO, CFO, president, and chairman of the board of directors.²¹⁷ A similar rule could clawback the compensation of managers with substantial responsibility for the operations of a company that is convicted of a crime that results in major public harm.

Likewise, legislators could implement certification requirements akin to that imposed under Section 302 of the Sarbanes-Oxley Act of 2002. That rule directed the SEC to adopt rules to require the top executive and financial officers at public companies to certify that the company’s annual and quarterly reports were accurate and complete. The SEC rule enforces this requirement with civil penalties for false certification, and also provides that if the false certification was “willfully” provided, the SEC can refer the case to the DOJ for possible criminal prosecution. As

²¹² This point has been made with respect to criminal prosecutions against Boeing and its executives for failure to address deficiencies in the 737 Max that led to deadly plane crashes. *See, e.g.*, Bob Van Voris et al., *Will Boeing Face U.S. Criminal Charges for 737 Max Crashes?*, BLOOMBERG (Mar. 19, 2019, 9:00 PM), <https://www.chicagobusiness.com/manufacturing/will-boeing-face-criminal-charges-737-max-crashes> (Kenneth Quinn, former Chief Counsel of the Federal Aviation Administration, notes that “[the FAA] want[s] to encourage people to come forward and admit mistakes, free from fear of reprisal or jail . . . the last thing the industry and FAA needs is the specter of a criminal investigation hovering over an accident inquiry.”)

²¹³ However, in some instances, the guilty state of mind may be clear. To take a recent example, there is evidence that Boeing CEO Dennis Muilenburg knew about problems with the 737 Max after the first crash. Dennis Muilenburg, CEO, Boeing, Remarks Before the U.S. Senate Committee on Commerce, Science and Transportation (video available at: <https://www.cnn.com/2019/10/29/watch-boeings-ceo-dennis-muilenburg-testify-before-congress-on-737-max-crashes.html>). This admission could support criminal charges against him, as well as charges against the company. Van Voris, *supra* note 212. If the charges are not ultimately brought, it suggests that something other than the difficulties associated with prosecution may be responsible for the lack of charges against high-level executives.

²¹⁴ Note that under the Responsible Corporate Officer Doctrine, “criminal liability can be expanded to executives whose subordinates engage in criminal activity, even if the executives are not aware of it, so long as the executives can be deemed responsible for the actors who commit the crime.” Dassin et al., *supra* note 210. However, this doctrine has been applied narrowly “in the context of offenses against the public health and welfare.” *Id.*

²¹⁵ Certain Orderly Liquidation Authority Provisions under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act, 76 Fed. Reg. 41626, 41628 (July 15, 2011).

²¹⁶ *Id.*

²¹⁷ *See* Dorothy Shapiro Lund, *Federalizing Fiduciary Duty: The Altered Scope of Officer Fiduciary Duty Following Orderly Liquidation Under Dodd-Frank*, 17 STAN J. L. BUS. & FIN. 224 (2012), https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12275&context=journal_articles.

part of that criminal prosecution, the DOJ could secure fines of up to \$5 million and up to twenty years in jail.²¹⁸ This rule helpfully induces executives to play a greater role in oversight of financial statements, and also eases the prospect of charges against executives who participated in financial statement manipulation or failed to monitor those who did.²¹⁹ Legislators could make greater use of certification requirements in other contexts, such as by requiring executives at financial institutions to certify that the institution is not engaging in crimes that could result in systemic harm.

Even without new legislation, firms could proactively adopt some reforms themselves: for example, they could require corporate executives to provide a share of their salary to a fund used to pay any criminal fines that accrue to the firm during their tenure, or they could provide that in the event of a criminal conviction or unfavorable settlement, all executives and directors would forfeit their compensation for that year (and possibly even prior years). However, even in cases when executives lose their jobs due to malfeasance that occurs on their watch, such punishment is uncommon: when John Stumpf was forced to retire under pressure from Wells Fargo, he did so with a pre-tax payout of more than \$80 million in stock and other compensation.²²⁰ Executive compensation is notoriously sticky and difficult to confiscate. As an additional example, consider that during the financial crisis, when insurance giant American International Group was receiving government funds because it was precariously close to failure, it simultaneously paid over \$200 million in bonuses to its employees.²²¹ Standing in the way of company-level reform of this kind are concerns that denying executives their compensation will make it harder for the company to recruit high-quality management who are averse to potential negative shocks to their individual income.²²² In our mind, that is a feature of such a proposal, not a bug. It is our hope that risk-averse individuals who sit atop complex organizations that are difficult to monitor externally feel compelled to exercise caution and supervise their employees thoughtfully. However, it will be important to design these rules in ways that encourage, rather than discourage, executives to identify and self-report bad behavior.²²³ Along those lines, shareholders (or legislators) could require executives to conduct due diligence and certify that employees are complying with the law.²²⁴

²¹⁸ Final Rule: Certification of Disclosure in Companies' Quarterly and Annual Reports, Securities Exchange Act Release No. 33-8124 (Aug. 22, 2002), <https://www.sec.gov/rules/final/33-8124.htm>.

²¹⁹ For a critical take on certification requirements, see Lisa M. Fairfax, *Form over Substance? Officer Certification and the Promise of Enhanced Personal Accountability Under the Sarbanes-Oxley Act*, 55 RUTGERS L. REV. 1 (2002), https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=1602&context=faculty_publications.

²²⁰ This trend may be changing. See Vanessa Romo, *CBS Denies Former CEO Les Moonves \$120 Million Severance Package*, NPR (Dec. 12, 2018, 7:26 PM), <https://www.npr.org/2018/12/17/677587813/cbs-denies-former-ceo-les-moonves-120-million-severance-package>.

²²¹ Geithner 2014. This provoked outrage from politicians on both sides of the aisle, including President Obama, who noted that "it's hard to understand how derivative traders at AIG warranted any bonuses, much less \$164 million in extra pay. How do they justify this outrage to taxpayers who are keeping the company afloat?" *Id.*

²²² Cf. *In re Goldman Sachs Group, Inc. Shareholder Litigation*, 2011 Del. Ch. LEXIS 151, 76 (2011) (citing *In re Citigroup*, 964 A.2d 106, 131 (Del Ch. 2009)) (explaining that expansive liability "could potentially chill the [ability of corporations to retain the] service of qualified directors").

²²³ As in other contexts, it will be important to reward cooperation with enforcement authorities in order to reduce the incentive to conceal bad acts.

²²⁴ Elizabeth Warren proposed this course of action for financial institution executives in her Too Big to Jail Act. See *id.*

Again, it is too early to say which of these reforms would be most beneficial. In the meantime, we urge researchers and other scholars to study this important question: Is corporate crime on the rise?

V. Conclusion

This Article takes important steps toward determining whether financial crime is on the rise. Our analysis of three distinct and novel data sources indicates that aggregate levels of certain types of misconduct by financial institutions has risen in the wake of the financial crisis of 2008. And our study of corporate criminal recidivism suggests a cause: an over-reliance on fines as a penalty. Although law and economics theory predicts that fines can adequately and efficiently deter crime by corporate agents, our results confirm that there exists an upper bound on fines that are imposed on firms. In addition, the shareholders that ultimately pay for misconduct when the entity is fined may not be able or willing to demand necessary changes. Our principal normative recommendation is for the government to supply, and researchers to analyze, better data on this subject. And if our results are confirmed after further study, the answer is clear: an enforcement regime that is limited in its ability to levy fines at an optimal level must rely on other forms of punishment—such as the imposition of liability on guilty individuals—to increase deterrence. Only then will corporate criminal punishment be seen as something more than a cost of doing business.