St. John's University School of Law

St. John's Law Scholarship Repository

Faculty Publications

2020

Real Insider Trading

Michael A. Perino

Follow this and additional works at: https://scholarship.law.stjohns.edu/faculty_publications

Part of the Criminal Law Commons, and the Securities Law Commons

Real Insider Trading

Michael A. Perino*†

Abstract

In popular rhetoric, insider trading cases are about leveling the playing field between elite market participants and ordinary investors. Academic critiques vary. Some depict an untethered insider trading doctrine that enforcers use to expand their power and enhance their discretion. Others see enforcers beset with agency cost problems who bring predominantly simple, easily resolved cases to create the veneer of vigorous enforcement. The debate has, to this point, been based mostly on anecdote and conjecture rather than empirical evidence. This Article addresses that gap by collecting extensive data on 465 individual defendants in civil, criminal, and administrative actions to assess how enforcers operationalize insider trading doctrine. The cases enforcement authorities bring are shaped by a complex and cross-cutting set of institutional and individual incentives. cognitive biases, legal requirements, the history of failed enforcement efforts, and the way in which the agency and the self-regulatory organizations deploy their investigatory resources. SEC enforcement is dominated by small stakes,

1647

^{*} Vice Dean for Academic Affairs and George W. Matheson Professor of Law, St. John's University School of Law.

[†] I received many helpful comments and suggestions from participants in the Annual Corporate and Securities Litigation Workshop, held at UCLA Law School, the National Business Law Scholars Conference at Berkeley, and the Conference on Empirical Legal Studies at Claremont McKenna College. I would also like to thank Stephen Bainbridge, Ilya Beylin, John Coffee, Jill Fisch, Michael Guttentag, Joseph Grundfest, Joan Heminway, Anita Krishnakumar, Donald Langevoort, Donna Nagy, James Park, Menesh Patel, and David Rosenfeld for their insights and comments. I owe a special debt of gratitude to my research assistants: Kathryn Baldwin, Keren Baruch, Michael DeRosa, and Melissa Parres. Matthew Anderson and Kelly Frevele provided additional research assistance. Any remaining errors are my own.

opportunistic trading by mid-level employees and their friends and family, most often involving M&A transactions. Those cases settle quickly, half within thirty days of filing. Criminal enforcement is generally reserved for more serious cases, measured by, among other things, the type of defendant, the size of the insider trading network, and the profits earned. In both settings, there is little evidence that enforcers are systematically stretching the boundaries of insider trading doctrine.

Table of Contents

I.	Introduction1	649
II.	The Rhetoric and Critique of Insider TradingEnforcement1A. Insider Trading Rhetoric1B. The Academic Critique of Insider Trading1	657
III.	Incentives and Enforcement Choices 1	668
IV.	The Dataset1	680
V.	Materiality in Insider Trading Cases1A. M&A Cases1B. Financial Information Cases1C. Product Approval Cases1D. The Limits of Insider Trading Enforcement1	.689 .694 .697
VI.	The Misappropriation Theory and Duties of Trust and Confidence	
VII.	The Targets of Insider Trading Enforcement1A. Civil Outcomes1B. Targeted Defendants1C. Insider Trading Activity1D. Tippers, Tippees, and Remote Tippees1E. Insider Trading Profits1F. Are Criminal Cases Different?1G. The SEC and Low Hanging Fruit1	719 721 724 728 732 733
VIII.	Conclusion	739

I. Introduction

Early on a September morning in 2012, two FBI agents knocked on John Johnson's door.¹ Johnson, in his mid-forties, had been a securities market professional (SMP) for years, and was, at the time, the Chief Investment Officer for a public pension fund.² The agents wanted to know about a trade he made in his personal account in July 2008.³ Just a few days before Brocade Communications, Inc. announced it was acquiring Foundry Networks, Inc., Johnson bought a small number of out-of-the-money Foundry call options and common shares.⁴ Foundry's stock price rose 32 percent and Johnson made \$136,000.⁵ Johnson admitted to the agents that he traded on material nonpublic information (MNPI) and agreed to cooperate in a criminal case brought against his immediate source, a hedge fund employee, and the original source of the information, Foundry's Chief Information Officer.⁶ Johnson pled guilty⁷ and, due in part to his cooperation, was fined and given a suspended sentence.⁸

I had the opportunity to interview Johnson, and I asked him why he traded and why he thought he could get away with it.⁹ Recently divorced and unemployed, Johnson was desperate for money.¹⁰ But he also thought that prosecutors and the Securities and Exchange Commission (SEC) would not bother with him.¹¹ Johnson believed that insider trading was endemic

4. Complaint ¶ 3, SEC v. Teeple, No. 13-cv-2010 (S.D.N.Y. Mar. 26, 2013), ECF No. 1.

6. Interview with John Johnson, *supra* note 1.

9. Interview with John Johnson, *supra* note 1.

11. *Id*.

^{1.} See Telephone Interview with John Johnson (Mar. 29, 2019) (recounting the story).

^{2.} See id.

^{3.} See id.

^{5.} $Id. \P 4.$

^{7.} United States v. Riley, 90 F. Supp. 3d 176, 183, 191–92 (S.D.N.Y. 2015).

^{8.} Nate Raymond, *Ex-Wyoming Fund Exec Turned Insider Trading Witness Avoids Prison*, REUTERS (Apr. 23, 2015, 4:12 PM), https://perma.cc/4V73-LE84 (PDF).

^{10.} *Id*.

among professional traders and that far more prominent traders were exploiting this kind of information on a massive scale, far in excess of his one comparatively small trade.¹² "I was," he told me, "just a guy from Denver."¹³

Johnson's impression of how and why enforcers target insider trading is not unusual. In popular rhetoric, insider trading prosecutions are about leveling the playing field and making markets fair for ordinary investors.¹⁴ The former United States Attorney for the Southern District of New York, Preet Bharara, whose office prosecuted Johnson, called insider traders "cheaters" who "rigged" the market, and he vowed to "investigate and prosecute this crime aggressively."¹⁵ Insider trading rhetoric has always had a populist overtone, and Bharara saved special condemnation for the "most advantaged, privileged, and wealthy insiders in modern finance," who violate the law to reap even greater wealth or to benefit "their friends and relatives at the expense of the trading public."¹⁶ The SEC generally views insider trading enforcement as a core component of its investor protection mandate, leading SEC officials to similar promises.¹⁷

Johnson's confidence that enforcement authorities would not bother with his case was clearly wrong, at least in hindsight. But was he just unlucky, or did he fundamentally misunderstand how prosecutors and the SEC actually deploy their enforcement resources?

That question is subject to a wide-ranging debate. Indeed, enforcement rhetoric is far removed from the critique of insider trading generally found on law review pages. While some argue

17. See What We Do, U.S. SEC. & EXCH. COMM'N, https://perma.cc/XA4D-W5TD (last updated June 10, 2013) (including the investigation of insider trading among the important aspects of protecting investors).

^{12.} *Id*.

^{13.} *Id*.

^{14.} See Preet Bharara, *The Future of White Collar Enforcement: A Prosecutor's View*, U.S. DEP'T OF JUST., https://perma.cc/KR9J-EEV6 (last updated May 13, 2015) (explaining that the fight against white collar crime stems from a commitment to the principle that markets should be fair, playing fields should be level, and citizens' accounts should be secure).

^{15.} *Id*.

^{16.} *Id*.

that most forms of insider trading should be legal,¹⁸ much of the current criticism focuses on regulation and enforcement. Many commentators complain that Congress, largely for political expediency, has never defined it.¹⁹ Instead, insider trading is enforced through Section 10(b)'s catch-all antifraud provision,²⁰ leading to a doctrine that is poorly theorized and riddled with inconsistencies.²¹ To avoid a blueprint for fraud the SEC has eschewed bright-line rules,²² but critics charge this approach is more about maximizing agency power and discretion than it is about preventing clever insider trading schemes.²³ "The result of executive agency ambiguity layered on top of congressional ambiguity," one set of critics complained, "is judicial power to decide what is and what is not illegal,"²⁴ which raises separation of powers, accountability, and due process concerns, especially in criminal prosecutions.²⁵

For legal academics, the doctrinal problems are legion. They fret over the uncertain parameters of materiality.²⁶ They worry about the lack of clarity regarding which duties of trust and confidence are sufficient to give rise to an insider trading claim if breached²⁷ or whether liability should be based on such

22. See The Insider Trading Sanctions Act of 1983: Hearings on H.R. 559 Before the Subcomm. on Sec. of the Senate Comm. on Banking, Hous., and Urb. Affs., 98th Cong. 35–38 (1984) (statement of John Fedders, Director, SEC Enforcement Division).

23. See Jonathan R. Macey, Deconstructing the Galleon Insider Trading Case, WALL ST. J., https://perma.cc/5TKY-7FXT (last updated Apr. 19, 2011).

24. M. Todd Henderson et al., Offensive Disclosure: How Voluntary Disclosure Can Increase Returns from Insider Trading, 103 GEO. L.J. 1275, 1280 (2015).

25. See Margaret H. Lemos, *Democratic Enforcement? Accountability and Independence for the Litigation State*, 102 CORNELL L. REV. 929, 976–77 (2017); Baer, *supra* note 19, at 145–48.

26. See Joan MacLeod Heminway, Just Do It! Specific Rulemaking on Materiality Guidance in Insider Trading, 72 LA. L. REV. 999, 1000 (2012).

27. See ANDERSON, supra note 18, at 75–78.

^{18.} See generally JOHN P. ANDERSON, INSIDER TRADING: LAW, ETHICS, AND REFORM (2018).

^{19.} See Miriam H. Baer, Insider Trading's Legality Problem, 127 YALE L.J.F. 129, 145–48 (2017).

^{20. 15} U.S.C. § 78j(b).

^{21.} See Baer, supra note 19, at 138–45.

duties.²⁸ Much recent scholarship focuses on what if any benefit a tipper must receive in order to create liability for tippees.²⁹ And there is a general sense that enforcers have exploited these gaps and uncertainties to expand insider trading liability too far,³⁰ a view occasionally reinforced in the popular press when enforcers target high-profile defendants.³¹ Some see civil and criminal enforcers as a tag-team, with the SEC and the judiciary liberally expanding the scope of liability in civil cases with lower burdens of proof and prosecutors exploiting those precedents to overreach in criminal ones.³²

But these critiques of aggressive and expansive litigation sit uncomfortably beside broader challenges to enforcement choices. Jonathan Macey and others argue that the SEC has strong institutional incentives to maximize the total number of cases brought and resolved and the penalties collected because congressional overseers tend to focus on those simple metrics to measure SEC effectiveness.³³ The agency therefore goes after "low-hanging fruit;" it avoids difficult, time consuming cases against high-profile or well-resourced defendants in favor of easy ones that are likely to settle quickly.³⁴ U.S. Attorneys have

32. See A.C. Pritchard, *The SEC, Administrative Usurpation, and Insider Trading*, 69 STAN L. REV. ONLINE 55, 63 (2016).

^{28.} See James D. Cox, Seeking an Objective for Regulating Insider Trading Through Texas Gulf Sulphur, 71 SMU L. REV. 697, 706 (2018); Richard A. Epstein, Returning to Common-Law Principles of Insider Trading After United States v. Newman, 125 YALE L.J. 1482, 1489 (2016).

^{29.} See Baer, supra note 19, at 129–34; Donna M. Nagy, Beyond Dirks: Gratuitous Tipping and Insider Trading, 42 J. CORP. L. 1, 48–51 (2016).

^{30.} See Jonathan R. Macey, *The Genius of the Personal Benefit Test*, 69 STAN. L. REV. ONLINE 64, 72 (2016) ("The government's objection to the status quo as reflected in *Dirks* and *Newman* is not to the ambiguity of these decisions but rather to the restraints they impose on the government's power and prosecutorial discretion.").

^{31.} See Jeff Cox, Leon Cooperman: SEC Insider Trading Case Was "Extraordinarily Abusive," CNBC (May 30, 2017, 12:18 PM), https://perma.cc/5T8E-5SEY (last updated May 30, 2017, 2:34 PM).

^{33.} Jonathan R. Macey, *The Distorting Incentives Facing the U.S. Securities and Exchange Commission*, 33 HARV. J.L. & PUB. POL'Y 639, 644, 646 (2010); *see* Margaret H. Lemos & Max Minzner, *For-Profit Public Enforcement*, 127 HARV. L. REV. 853, 863–95 (2014).

^{34.} See Macey, supra note 33, at 646–47.

been similarly criticized for their unwillingness to try cases unless they have overwhelming evidence of guilt.³⁵

None of these depictions seems entirely satisfying. Enforcement rhetoric is clearly overblown. Numerous high-profile targets have gone unprosecuted despite strong evidence of guilt while small traders, who are neither privileged nor wealthy, are frequently targeted. Pursuing expansive definitions of insider trading, particularly against well-resourced defendants, is a poor strategic choice for an agency bent on maximizing quick settlements as these cases are likely to be vigorously contested. And, while there are certainly ambiguities in insider trading law, are those ambiguities really any more substantial than the ambiguities found in mail and wire fraud or other white collar offenses?³⁶ But beyond these generalities the fundamental problem in evaluating these competing claims is that we lack the data necessary to rigorously analyze them.

What we know about law enforcement efforts typically comes from reported opinions and from journalistic accounts of prominent cases.³⁷ While such sources are useful, they can be misleading for obtaining an accurate picture of real insider trading enforcement as it actually occurs on the ground. Doctrinal scholarship often devotes inordinate attention to the latest Supreme Court opinion or to cases with unusual fact patterns. Such scholarship can highlight otherwise obscure inconsistencies or doctrinal gaps, but without reliable data showing how those cases fit into the broader framework of insider trading enforcement, we run the risk that those lacunae

^{35.} See Jesse Eisinger, The Chickenshit Club 293 (2017).

^{36.} See Samuel W. Buell, Is the White Collar Offender Privileged? 63 DUKE L.J. 823, 842–43 (2014).

^{37.} See generally SHEELAH KOLHATKAR, BLACK EDGE (2017) (analyzing the governmental investigation of Steven A. Cohen's hedge fund); CHARLES GASPARINO, CIRCLE OF FRIENDS (2013) (tracing the prosecution of several high-profile insider trading cases); JAMES B. STEWART, DEN OF THIEVES (1991) (exploring insider trading scandals of the 1980s). A few studies have provided some limited descriptive statistics of insider trading enforcement. See, e.g., Chien Chung Lin & Eric Hung, U.S. Insider Trading Law Enforcement: Issues and Survey of SEC Actions from 2009 to 2013, 11 NAT'L TAIWAN U. L. REV. 37, 54–65 (2016) (analysis of insider trading enforcement from 2009 through 2013).

will assume outsized importance in academic and policy debates. Examining how SEC enforcement officials and prosecutors operationalize insider trading doctrine allows scholars and legislators to evaluate more reliably whether enforcers consistently overreach or under-enforce.³⁸

Relying on a hand-collected sample of 465 individual defendants in civil, criminal, and administrative actions, this article separates the myths and the realities of insider trading enforcement. Who actually gets targeted in insider trading enforcement actions? What kinds of MNPI are typically at issue? What kinds of duties tend to give rise to enforcement actions? What if any significant differences exist between civil and criminal enforcement? While my goals are thus largely descriptive, I do offer explanations for the observed enforcement patterns and reveal previously undisclosed information about the SEC's own internal analyses of the effectiveness of its surveillance techniques.

There is little evidence that enforcers are systematically stretching the boundaries of insider trading doctrine. For example, there is little doubt about the significance of the MNPI typically at issue. More than 93 percent of cases involve one of three types: information about impending M&A transactions; unannounced quarterly or other financial results; and unannounced results from pharmaceutical or other medical product trials.³⁹ Two-thirds of cases involve straightforward breaches of duty, most typically arising from employment or other traditional fiduciary relationships.⁴⁰ There are few remote tippees targeted in enforcement actions.⁴¹ Over 70 percent of defendants are either the original source of the information or a first level tippee.⁴² When remote tippees are targeted they typically obtain the information directly from the first level

^{38.} See Rachel E. Barkow, Overseeing Agency Enforcement, 84 GEO. WASH. L. REV. 1129, 1131–38 (2016) (calling for greater scrutiny of enforcement discretion); Kate Andrias, *The President's Enforcement Power*, 88 N.Y.U. L. REV. 1031, 1049–51 (2013) (same).

^{39.} See infra Table 2.

^{40.} See infra Table 1.

^{41.} See infra Part VII.D.

^{42.} See infra Table 10.

tippee.⁴³ Overall, 92 percent of defendants fall into one of these categories.⁴⁴

Naturally, one can find counterexamples, especially in civil actions alleging non-traditional duties of trust and confidence and occasionally with respect to materiality.⁴⁵ But these cases are the outliers not the norm. Most cases fall squarely into what the Supreme Court recently called the "heartland" of insider trading doctrine.⁴⁶ There are certainly enforcement issues that could benefit from more precise statutory language, but the data give little reason to believe that Congress should legislate to curb overly aggressive enforcement.⁴⁷

The observable enforcement patterns also reveal much about how enforcers operate. These data suggest that the cases SEC and criminal enforcement authorities bring are shaped by a complex and sometimes cross-cutting set of institutional and individual incentives, cognitive biases, legal requirements, the history of failed enforcement efforts, and the way in which the agency and the self-regulatory organizations (SROs) deploy their resources to identify improper trades.⁴⁸ There is a good deal of evidence suggesting that SEC enforcement is dominated by easy cases that settle quickly.⁴⁹ Nearly half of civil enforcement actions settle within thirty days of filing.⁵⁰ Median direct profits in these cases—which are often against mid-level employees or their friends and family—are less than \$50,000, not the millions typically trumpeted in enforcement rhetoric.⁵¹

- 44. See infra Table 10.
- 45. See infra Parts V–VI.
- 46. See Salman v. United States, 137 S. Ct. 420, 429 (2016).

47. Legislative fixes could beneficially close some gaps in existing doctrine. For example, proposed legislation defines outright theft of MNPI, such as through computer hacking schemes, as insider trading. See SEC v. Dorozhko, 574 F.3d 42, 51 (2d Cir. 2009) (remanding the case to determine whether a fraudulent misrepresentation in a computer hacking scheme was "deceptive" for the purposes of § 10(b)); Insider Trading Prohibition Act, H.R. 2534, 116th Cong. (2019) (proposing to explicitly codify a ban on insider trading).

- 48. See infra Part III.
- 49. See infra note 153 and accompanying text.
- 50. See infra Table 7.
- 51. See infra Table 11.

^{43.} See infra Part VII.D.

Rather than being a mechanism for leveling the playing field between elite market participants and retail investors, insider trading, especially on the civil side, turns out to be a middle-class violation.⁵²

The prevalence of these actions raises important questions about whether civil enforcement can effectively deter sophisticated insider trading schemes. Indeed, a previously undisclosed SEC analysis found that existing surveillance techniques were adequate to identify this kind of opportunistic trading but sometimes missed coordinated trading among sophisticated SMP.⁵³ While the SEC has altered some of its surveillance techniques to try to rectify these problems, its docket continues to be shaped as much by the agency's inability to try large numbers of cases and individual attorneys' biases toward low risk matters as they are by attempts to pad statistics. There are, as well, systematic differences between cases with and without criminal enforcement-criminal enforcement is generally reserved for more serious cases, measured by, among other things the type of defendant, the size of the insider trading network, and the profits earned.⁵⁴ But like civil cases, the criminal cases tend to be those in which liability is fairly certain.

There is a simple and obvious explanation for these patterns. On both the individual and institutional level enforcers want to win and bringing novel or uncertain cases increases the chances they will not. For example, the SEC lost more than 16 percent of cases against tippees more than two steps removed from the source compared to just 6.5 percent of cases against other defendants.⁵⁵ Courts thus appear to act as an effective check on enforcement overreach, one to which the SEC is highly responsive. After the Second Circuit's decision in *United States v. Newman*,⁵⁶ which made it harder to pursue actions against remote tippees, the SEC did not bring a single

^{52.} See infra Table 11.

^{53.} Telephone Interview with Daniel M. Hawke, Former SEC Enforcement Official (July 1, 2019) [hereinafter "Hawke Interview"].

^{54.} See infra Part VII.F.

^{55.} See infra Part VII.D.

^{56. 773} F.3d 438 (2d Cir. 2014).

action against a tippee more than two steps removed from the source during the remainder of the study period.⁵⁷ Courts, enforcers, and defense counsel are engaged in an ongoing dialog that both limits the expansive application of insider trading doctrine and generates the kind of interstitial, dynamic lawmaking that would be difficult for Congress to provide.

The discussion proceeds as follows. Part II begins by sketching in more detail the rhetoric of insider trading enforcement. Part III describes the institutional and individual incentives enforcers face when they operationalize their enforcement strategies. Part IV describes the dataset. Part V discusses how materiality is defined in litigated cases. Part VI examines the duties of trust and confidence at issue in filed enforcement actions, a key feature of actions alleging that individuals misappropriated information from a source. Part VII explores the targets of civil and criminal insider trading enforcement. Brief concluding remarks follow. A data appendix provides additional description of the variables studied.

II. The Rhetoric and Critique of Insider Trading Enforcement

A. Insider Trading Rhetoric

Insider trading has a set of stock narratives and metaphors that shape the way the public, lawyers, and judges talk and write about it.⁵⁸ The laws prohibiting it have an enormous symbolic resonance and the law's narrative conventions tend to flow from and reinforce that message. As Donald Langevoort has argued, insider trading law expresses a deep social commitment to equal opportunity along with a desire for strict adherence to fiduciary obligations.⁵⁹ Insider trading embodies a

^{57.} See infra Table 10.

^{58.} See Michael Hanne & Robert Weisberg, *Introduction* to NARRATIVE AND METAPHOR IN THE LAW 1, 1–10 (Michael Hanne & Robert Weisberg eds., 2018) (examining the function of narrative and metaphor in legal theory and practice).

^{59.} See Donald C. Langevoort, Rereading Cady, Roberts: The Ideology and Practice of Insider Trading Regulation, 99 COLUM. L. REV. 1319, 1327–31 (1999).

revulsion for elite special privileges.⁶⁰ Concerns about it similarly reflect our perennially ambivalent attitudes regarding the morality and mores of SMPs.⁶¹

When insider trading pervades the common consciousness, it tends to follow a narrow set of story lines. For the better part of two centuries Wall Street has been a recurring villain in American life,⁶² and it is unsurprising to find the stock market operator at the center of many insider trading morality plays. Ivan Boesky,⁶³ Raj Rajaratnam,⁶⁴ Steven Cohen,⁶⁵ and Gordon Gekko⁶⁶—real and fictional insider traders—exploit their market savvy and superior access to MNPI to earn undeserved wealth at the expense of ordinary investors. Their profits come not from productive hard work, but from jumping the line ahead of less sophisticated or less connected investors.

Corporate executives,⁶⁷ directors,⁶⁸ and even members of Congress⁶⁹ act wrongfully when they breach a fiduciary or other well-recognized duty of trust and confidence to misappropriate information for personal gain or to pass it on to friends and

65. See Cohen, Investment Advisers Act of 1940, Release No. 4307, 2016 SEC LEXIS 3256 (Jan. 8, 2016).

66. See WALL STREET (20th Century Fox 1987).

67. See, e.g., United States v. Nacchio, 555 F.3d 1234, 1259 (10th Cir. 2009) (affirming the insider trading conviction of Joseph Nacchio, former CEO of Qwest Communications International, Inc.).

68. See, e.g., United States v. Gupta, 747 F.3d 111, 140 (2d Cir. 2014) (upholding the securities fraud convictions of Rajat Gupta, a director of Goldman Sachs Group, Inc.).

69. See Michael A. Perino, A Scandalous Perversion of Trust: Modern Lessons from the Early History of Congressional Insider Trading, 67 RUTGERS U. L. REV. 335, 391–92 (2014) (examining congressional insider trading and questioning the necessity of its legislative prohibition).

^{60.} See id. at 1328–29.

^{61.} See Michael A. Perino, *The Lost History of Insider Trading*, 2019 U. ILL. L. REV. 951, 967–71 (2019) (historical analysis of legal treatment of and attitudes regarding insider trading).

^{62.} See STEVE FRASER, EVERY MAN A SPECULATOR 412 (2005) ("There were plenty of enemies out there, many candidates vying for the role of 'the big bad wolf.' But the biggest and baddest wolf everyone, or nearly everyone, would have settled on was Wall Street.").

^{63.} See STEWART, supra note 37, at 81–206.

^{64.} See United States v. Rajaratnam, 802 F. Supp. 2d 491, 520 (S.D.N.Y. 2011).

family. Neither courts⁷⁰ nor the U.S. Sentencing Guidelines⁷¹ look favorably on such defendants. But really any famous defendant works to tell a story about unfair advantages inappropriately conferred on the favored few.⁷² That (along with a healthy dose of *schadenfreude*) is why insider trading scandals involving public figures (Martha Stewart, for example) garner outsized attention as compared to their size and significance.⁷³

In a more cynical version of this narrative, insider trading became a crime because those without wealth or privileged access to information envied those who did.74 Congress and enforcement officials capitalized on those sentiments to help legitimize their own positions.⁷⁵ As Thomas Joo has argued, condemning insider trading allowed government officials to translate "economic issues into a moral conflict in which the government clearly held the high ground."⁷⁶ Insider trading prosecutions could distract from more complicated, intractable problems in capital markets.⁷⁷ During economic crises, insider trading focused attention on an easily understood and seemingly unfair practice and away from the more complex, difficult roots of those upheavals—systemic problems that legal standards and enforcement officials may have been ill-equipped to address.⁷⁸ Clearly, enforcers act illegitimately if they put these kinds of political needs ahead of public interest. As

^{70.} See, e.g., United States v. Gupta, 904 F. Supp. 2d 349, 354 (S.D.N.Y. 2012) (asserting that the defendant "brazenly" breached his fiduciary duty).

^{71.} See U.S. SENT'G GUIDELINES MANUAL § 3B1.3 (U.S. SENT'G COMM'N 2018) (imposing an additional penalty when a defendant abuses a position of trust); see also id. § 2B1.4 (addressing insider trading).

^{72.} See supra notes 63–66 and accompanying text.

^{73.} See, e.g., Landon Thomas, Jr., Martha Stewart Settles Civil Insider-Trading Case, N.Y. TIMES (Aug. 7, 2006), https://perma.cc/KCG9-MBBV (reporting Martha Stewart's settlement agreement regarding her insider trading charges).

^{74.} See Jeanne L. Schroeder, *Envy and Outsider Trading: The Case of Martha Stewart*, 26 CARDOZO L. REV. 2023, 2026 n.13 (2005).

^{75.} See Thomas W. Joo, Legislation and Legitimation: Congress and Insider Trading in the 1980s, 82 IND. L.J. 575, 575 (2007).

^{76.} Id. at 602.

^{77.} See id. at 576.

^{78.} See id.

Margaret Lemos has written, we should "disapprove of enforcement decisions that echo the angry mob."⁷⁹

The rhetoric justifying enforcement efforts leans heavily on gambling and sports metaphors and reinforces the dominant narrative. Courts have branded convicted insider traders as "cheats" who take unfair advantage of ordinary investors.⁸⁰ The most common justification for prohibiting insider trading is that it undermines public confidence in the integrity of the stock market.⁸¹ Without that confidence, ordinary investors would refuse to invest, ultimately impairing capital formation.⁸² Or, as the Supreme Court observed: "Who would knowingly roll the dice in a crooked crap game?"⁸³

SEC officials thus portray themselves as vigorous guardians of market fairness.⁸⁴ Insider trading enforcement has been a central focus of the SEC's efforts since at least 1981, when Chairman John Shad announced that the agency would "comedown on insider trading with hobnail boots."⁸⁵ A decade later, another chairman vowed to leave a defendant, "naked, homeless, and without wheels."⁸⁶ In the ensuing years, other SEC officials, albeit in less colorful language, have consistently asserted that policing insider trading "bolster[s] the confidence so necessary for our markets to thrive."⁸⁷

^{79.} Lemos, *supra* note 25, at 964.

^{80.} See SEC v. Payton, 97 F. Supp. 3d 558, 559 (S.D.N.Y. 2015).

^{81.} See Perino, supra note 61, at 952 n.1.

^{82.} See id. at 957.

^{83.} Basic Inc. v. Levinson, 485 U.S. 224, 247 (1988).

^{84.} See 15 U.S.C. § 78b (determining that an act is necessary "to insure the maintenance of fair and honest markets").

^{85.} Leslie Wayne, *Inside Trading by Outsiders*, N.Y. TIMES, May 27, 1984 (§ 3), at 1.

^{86.} Jonathan Meyer Eisenberg, *Enforcement Issues and Litigation*, 21 SEC. REGUL. L.J. 421, 421–22 (1994) (quoting Kevin G. Salwen & Laurie P. Cohen, *SEC Under Breeden Takes a Harder Line on Securities Crime*, WALL ST. J., May 10, 1990, at A1).

^{87.} Mary L. Schapiro, Chairman, U.S. Sec. & Exch. Comm'n, Remarks at the Practising Law Institute's SEC Speaks (Feb. 24, 2012), https://perma.cc/JB8T-4SQ3 (PDF).

SEC rhetoric also tends to focus on the resources deployed to detect even small and obscure violations.⁸⁸ After the financial crisis, the SEC invested in information technology designed to root out cases that may have previously gone undetected.⁸⁹ It was part of a larger "broken windows" enforcement approach that sought to bring "cases against traders of all different types" and to pursue "every level of violation."⁹⁰

Nowhere was the rhetoric about fairness, status, and privilege more prominent than in the public statements of the prosecutors who spearheaded the post-financial crisis crackdown on insider trading.⁹¹ Enforcing those proscriptions, former U.S. Attorney Bharara observed, was a commitment that "our markets should be fair; that our playing fields should be level; and that our citizens' accounts should be secure."⁹² Prosecutorial efforts sought to protect a "free and fair marketplace" where ordinary investors did not have to fear that privileged insiders were rigging the market.⁹³ For Bharara,

90. Mary Jo White, Chair, U.S. Sec. & Exch. Comm'n, Remarks Before the SEC Historical Society (June 4, 2015), https://perma.cc/S23B-CDMK (PDF); Mary Jo White, Chair, U.S. Sec. & Exch. Comm'n, Remarks at the Securities Enforcement Forum (Oct. 9, 2013), https://perma.cc/S8FQ-TWNV (PDF).

91. See Bharara, supra note 14.

92. Id.

93. See Press Release, U.S. Dep't of Justice, Managing Director of Investment Bank Found Guilty of Insider Trading Charges (Aug. 17, 2016), https://perma.cc/LF67-UKJ5 (PDF) ("Insider trading rigs the securities markets in favor of cheaters, and we will continue to investigate and prosecute this crime aggressively."); Massimo Calabresi & Bill Saporito, *The Street Fighter*, TIME, Feb. 13, 2012, at 23, https://perma.cc/BX8G-XYUY (PDF)

'Insider trading tells everybody at precisely the wrong time that everything is rigged,' [Bharara] says, 'and only people who have a billion dollars and have access to and are best friends with people

^{88.} See Oversight of the SEC's Agenda, Operations, and FY 2015 Budget Request Before the H. Comm. on Fin. Servs., 113th Cong. 57 (2014) (statement of Mary Jo White, Chair, U.S. Sec. & Exch. Comm'n), https://perma.cc/K4EQ-8JSL (PDF) ("[W]e have continued to improve our efficiency and effectiveness by . . . deploying more risk-based analytics to allow us to do more with our resources, and to do so more quickly.").

^{89.} See MARY L. SCHAPIRO, FY 2010 PERFORMANCE AND ACCOUNTABILITY REPORT 2, U.S. SEC. & EXCH. COMM'N (2010), https://perma.cc/8E2G-YWWG (PDF).

insider trading was most pernicious and harmful when it was committed by the wealthy or by SMPs.⁹⁴ "Disturbingly," he noted, "many of the people who are going to such lengths to obtain inside information for a trading advantage are already among the most advantaged, privileged, and wealthy insiders in modern finance,"⁹⁵ and he decried a "creeping culture of corruption"⁹⁶ on Wall Street.

Enforcement rhetoric thus focuses on issues of market integrity and fairness. It emphasizes the role that civil and criminal actions play in maintaining a level playing field. And it targets its sharpest criticism for SMPs and the upper echelons of corporate America, along with the wealthy and well-connected. Legal scholars tend to see matters from a substantially different perspective.

B. The Academic Critique of Insider Trading

A consistent complaint in insider trading scholarship is that insider trading is not precisely defined in any federal statute.⁹⁷ The proscription has instead emerged from what Jill Fisch calls a "lawmaking partnership" between Congress, the SEC, federal prosecutors, and the courts.⁹⁸

98. Jill E. Fisch, Federal Securities Fraud Litigation as a Lawmaking Partnership, 93 WASH. U. L. REV. 453, 480–81 (2015).

who are on boards of directors of major companies—they're the only ones who can make a true buck.'

^{94.} See Preet Bharara, Why Corporate Fraud Is so Rampant: Wall Street's Cop, CNBC (July 23, 2012, 1:33 PM), https://perma.cc/43UC-FABB ("We have witnessed the most educated, successful, and monied professionals in the country put their companies—not to mention their own liberty—at risk by engaging in flagrant and foolhardy illegal conduct.").

^{95.} Bharara, *supra* note 14.

^{96.} Calabresi & Saporito, *supra* note 93, at 23.

^{97.} See John C. Coffee, Jr., *Tippees and Tippers: The Impact of* Martoma II, COLUM. L. SCH.: CLS BLUE SKY BLOG (July 23, 2018), https://perma.cc/T4JQ-NQL6 ("Congress should take up the difficult and dangerous task of turning a common law crime into a real statute."). Recently, Bharara agreed to lead a task force that would propose changes to update insider trading law. See Preet Bharara & Robert J. Jackson, Jr., Opinion, Insider Trading Laws Haven't Kept Up with the Crooks, N.Y. TIMES (Oct. 9, 2018), https://perma.cc/5AQF-UPMD.

The most frequently used statute does not mention insider trading. Section 10(b) empowers the SEC to promulgate rules prohibiting "any manipulative or deceptive device or contrivance"⁹⁹ Using that power, the SEC adopted Rule 10b-5, which prohibits material misrepresentations or omissions in connection with the purchase or sale of securities.¹⁰⁰ Nineteen years after adopting Rule 10b-5, the SEC decided in *In re Cady, Roberts & Co.*¹⁰¹ that a broker violated it when he traded after being tipped by a director that a company was about to cut its dividend.¹⁰²

Corporate law scholar William Cary, at the time the SEC Chairman and the author of that opinion, articulated the same fairness concerns that would animate enforcement over the ensuing decades.¹⁰³ Prohibiting insider trading responded to "the plight of the buying public—wholly unprotected from the misuse of special information."¹⁰⁴ To promote investor confidence, the prohibition should be broadly stated and applied expansively, not hemmed in by the "fine distinctions and rigid classifications" that had limited insider trading under state common law.¹⁰⁵

For a time, courts adopted that view, holding that the SEC's "abstain or disclose" rule applied to "anyone" in possession of MNPI.¹⁰⁶ But in a now familiar history, three Supreme Court cases—*Chiarella v. United States*,¹⁰⁷ *Dirks v. SEC*,¹⁰⁸ and

104. Id. at *15.

105. Id. at *12; see Donald C. Langevoort, "Fine Distinctions" in the Contemporary Law of Insider Trading, 2013 COLUM. BUS. L. REV. 429, 430–31 (2013) (discussing Cady, Roberts).

106. SEC v. Tex. Gulf Sulphur Co., 401 F.2d 833, 848 (2d Cir. 1968) (en banc), cert. denied, 394 U.S. 976 (1969).

108. 463 U.S. 646 (1983).

^{99. 15} U.S.C. § 78j.

^{100. 17} C.F.R. § 240.10b-5 (2020).

^{101.} Cady, Roberts & Co., Exchange Act Release No. 6668, 1961 SEC LEXIS 385 (Nov. 8, 1961).

^{102.} *Id.* at *4.

^{103.} See *id.* at *12 (stating that the obligation for corporate insiders goes to "the inherent unfairness involved where a party takes advantage of such information knowing it is unavailable to those with whom he is dealing").

^{107. 445} U.S. 222 (1980).

United States v. O'Hagan¹⁰⁹—substantially reshaped insider trading liability. Chiarella held that silence is only a fraud if the trader owes a fiduciary or other duty of trust and confidence to the person on the other side of the transaction (the "classic" theory of insider trading).¹¹⁰ Dirks sought to limit the liability of tippers and tippees.¹¹¹ Tippees are only liable if the original tip was passed in breach of a fiduciary duty and if the tippees know about the breach and that the tip involved MNPI.¹¹² Worried about the inhibiting influence that an imprecise standard might have on securities analysts. *Dirks* held that such breaches occur only when the tipper receives a direct or indirect personal benefit for making the tip, which can be a pecuniary gain, a reputational benefit, or when he or she makes a gift of the information to a relative or friend.¹¹³ In O'Hagan, the Court expanded liability by endorsing the misappropriation theory, which makes liable those who take information in breach of a fiduciary or other duty of trust and confidence owed to the source of the information.¹¹⁴

Thus, for nearly sixty years, the precise contours of insider trading liability have flowed from case law rather than precise statutory language. Some view this lawmaking partnership as a virtue rather than a handicap. Donna Nagy argues that Congress's legislative efforts have ratified and built on the Court's insider trading jurisprudence.¹¹⁵ "Congress's multiple determinations to forego a legislative definition," she wrote, "evidence not abdication, but rather concerted judgments that fraud-based insider trading and tipping proscriptions—and the interstitial lawmaking inherent in such proscriptions—put securities traders on appropriate notice that transactions based on misappropriated information will be subject to stiff civil

^{109. 521} U.S. 642 (1997).

^{110.} *Chiarella*, 445 U.S. at 232–33.

^{111.} Dirks, 463 U.S. at 660, 663–64.

^{112.} *Id.* at 660.

^{113.} See id. at 663–64.

^{114.} See O'Hagan, 521 U.S. at 650–52.

^{115.} Donna Nagy, Salman v. United States: Insider Trading's Tipping Point?, 69 STAN. L. REV. ONLINE 28, 32 (2016).

sanctions and harsh criminal penalties."¹¹⁶ For Jill Fisch, this lawmaking partnership provides more than political insulation for Congress.¹¹⁷ An iterative and responsive lawmaking partnership "is well positioned to respond to the dynamic structure of the securities markets and the evolution of information flow due to changes in technology and market participants."¹¹⁸

But flexibility can go hand-in-hand with a lack of clarity, and many commentators question whether market participants have appropriate notice about what conduct is subject to enforcement.¹¹⁹ To be sure, there is a broad general consensus about the "heartland" of insider trading.¹²⁰ Many cases fit comfortably within existing doctrines.¹²¹ It is at the boundaries where problems arise. In these areas, scholars have highlighted a host of anomalies and inconsistencies that could lead to inconsistent and overbroad enforcement. And uncertainty abounds over whether these marginal cases represent the bulk, or even a substantial minority, of enforcement output.

A common critique involves the definition of materiality, an area where the SEC and courts have never been willing to create bright-line rules.¹²² Some commentators worry that enforcers

^{116.} *Id*.

^{117.} See Fisch, supra note 98, at 470–71; Langevoort, supra note 59, at 1340 ("[Leaving] hard issues open to ad hoc judicial resolution is a good way to avoid (or at least defer) costly political confrontation.").

^{118.} Fisch, *supra* note 98, at 484; *see* Samuel W. Buell, *The Upside of Overbreadth*, 83 N.Y.U. L. REV. 1491, 1563–64 (2008) (arguing that broad statutes can be used to respond to criminal innovation).

^{119.} See Buell, *supra* note 118, at 1547 (arguing that broad standards can result in a lack of clarity for market participants).

^{120.} See Richard W. Painter et al., Don't Ask, Just Tell: Insider Trading after United States v. O'Hagan, 84 VA. L. REV. 153, 228 (1999) (arguing that the evolution of insider trading law has nothing to do with the heart of it).

^{121.} See, e.g., United States v. Gupta, 747 F.3d 111, 140 (2d Cir. 2014); United States v. Tinghui Xie, 942 F.3d 228, 232 (5th Cir. 2019).

^{122.} See Langevoort, supra note 59, at 1338 (describing Congress's decision to forego a definition of "materiality" even after it was recommended by the American Law Institute).

could exploit imprecise materiality standards to bolster their enforcement statistics. $^{123}\,$

To the extent that there are uncertainties in insider trading doctrine and enforcers exercise insufficient prosecutorial discretion, the resulting difficulties will be most acute in criminal cases. Many commentators and scholars argue that insider trading cases represent a classic case of prosecutorial overreach, a misuse of criminal processes to penalize what are at most fiduciary breaches.¹²⁴ Rather than acting through the usual rulemaking checks and balances or through the politically accountable legislative process, enforcers pursue "regulation by enforcement,"125 and define insider trading doctrine haphazardly or in ways that maximize the interests of enforcers. Commentators worry-particularly in times of economic turmoil—that vague criminal liability standards will "embolden[] prosecutors to push the law beyond established boundaries."¹²⁶ And they suggest that novel theories the SEC pursues in civil cases will bleed over into criminal prosecutions.¹²⁷

These due process concerns have centered recently on liability standards for remote tippees, individuals who receive a

^{123.} See Lemos, supra note 25, at 955 ("Enforcers likewise may be anxious to please their overseers with impressive statistics of cases won and settlements secured.").

^{124.} See Erik Luna, The Overcriminalization Phenomenon, 54 AM. U. L. REV. 703, 713–14 (2005) ("[I]t encompasses a broad array of issues, including: what should be denominated as a crime and when it should be enforced; who falls within the law's strictures or, conversely, avoids liability altogether; and what should be the boundary."); John C. Coffee, Jr., Does "Unlawful" Mean "Criminal"? Reflections on the Disappearing Tort/Crime Distinction in American Law, 71 B.U. L. REV. 193, 202 (1991) ("[F]ew legal categories seem inherently less 'criminal' in character than the civil law applicable to fiduciary duties or to the use of economic duress in negotiations.").

^{125.} See Lemos, supra note 25, at 949–50. For analyses focusing specifically on the SEC, see ROBERTA KARMEL, REGULATION BY PROSECUTION: THE SECURITIES AND EXCHANGE COMMISSION VS. CORPORATE AMERICA 102 (1982); Harvey L. Pitt & Karen L. Shapiro, Securities Regulation by Enforcement: A Look Ahead at the Next Decade, 7 YALE J. ON REG. 149, 156–57 (1990).

^{126.} J. Kelly Strader, (*Re*)Conceptualizing Insider Trading: United States v. Newman and the Intent to Defraud, 80 BROOK. L. REV. 1419, 1422 (2015).

^{127.} See Pritchard, supra note 32, at 62.

tip not directly from an insider but from another tippee.¹²⁸ Other scholars worry that the SEC pursues an ever-expansive definition of duties under the misappropriation theory.¹²⁹ Rather than focusing on employment relationships or other traditional fiduciary duties, critics point to cases where the SEC has found duties of trust and confidence in family relationships, friendships, and in other unusual relationships—unusual, that is, in terms of established common law duties.¹³⁰ The farther afield enforcers search for remote tippees, the more expansively they define duties, and the less notice individuals will presumably have that their conduct violated Rule 10b-5.

This lack of notice about the scope of liability is a perennial issue.¹³¹ Justice Scalia argued in *Whitman v. United States*,¹³² that the Court was not required to defer to either a prosecutor's or the SEC's interpretation of the scope of insider trading liability.¹³³ He signaled a willingness to carve back on the breadth of insider trading doctrine through the rule of lenity.¹³⁴ While the Court recently upheld a reasonably broad interpretation of tipper liability,¹³⁵ questions remain about the

133. Id. at 1003, 1005.

^{128.} See Fisch, supra note 98, at 483.

^{129.} See, e.g., Stephen M. Bainbridge, Incorporating State Law Fiduciary Duties into the Federal Insider Trading Prohibition, 52 WASH. & LEE L. REV. 1189, 1243–45 (1995).

^{130.} See Painter, supra note 120, at 176–77.

^{131.} See Chiarella v. United States, 445 U.S. 222, 235 n.20 (1980) ("[A] judicial holding that certain undefined activities 'generally are prohibited' by § 10(b) would raise questions whether either criminal or civil defendants would be given fair notice that they have engaged in illegal activity."); United States v. Willis, 737 F. Supp. 269, 276–77 (S.D.N.Y. 1990) (claiming that this prosecution deprived Willis of due process of law because the law was "too unclear . . . to provide him with fair notice that his conduct was illegal"); see also Jill E. Fisch, Start Making Sense: An Analysis and Proposal for Insider Trading Regulation, 26 GA. L. REV. 179, 183–84 (1991); ("The litigation history of insider trading reveals fundamental disagreement over the rationale behind the prohibition as well as its scope."); Painter, supra note 120, at 210 (discussing how a fiduciary may receive information outside of their fiduciary relationship and be unsure of whether they can trade on that information).

^{132. 574} U.S. 1003 (2014).

^{134.} *Id*.

^{135.} See Salman v. United States, 137 S. Ct. 420, 427–28 (2016).

overlap between criminal and civil enforcement.¹³⁶ Indeed, recent enforcement efforts have sought to avoid some of the definitional landmines that have arisen under Rule 10b-5 by pursuing insider trading prosecution under a broad, but infrequently used, securities fraud provision in the Sarbanes-Oxley Act of 2002.¹³⁷

III. Incentives and Enforcement Choices

Enforcement is policymaking.¹³⁸ Whether in the civil or criminal context, enforcers shape the law when they make choices about which cases to pursue and which to drop.¹³⁹ They regularly make decisions about enforcement strategy, choosing to emphasize particular kinds of violations or focusing efforts on particular industries.¹⁴⁰ Those priorities shift not only from administration to administration¹⁴¹ but from one enforcement official to the next.¹⁴² Enforcers exercise largely unreviewable discretion in deciding what and how to charge.¹⁴³ In a world where most cases settle, they act as both enforcer and

^{136.} See Max Minzner, Should Agencies Enforce?, 99 MINN. L. REV. 2113, 2142–43 (2015) (describing overlapping enforcement authority, which could include those in the Department of Justice with those in other executive agencies).

^{137. 15} U.S.C. §§ 7201–7266; see United States v. Blaszczak, 947 F.3d 19, 30–34 (2d Cir. 2019) (interpreting 18 U.S.C. §§ 1343, 1348); Karen E. Woody, *The New Insider Trading*, 52 ARIZ. ST. L.J. 594, 614–17 (2020) (discussing increasing use of § 1348).

^{138.} See Lemos, supra note 25, at 947–49.

^{139.} Mila Sohoni, *Crackdowns*, 103 VA. L. REV. 31, 41 (2017) ("[T]he most critical determinant of the functional rules that actually govern primary conduct will be the executive's conscious, prospective choices of which laws to enforce vigorously.").

^{140.} *Id*.

^{141.} Terry M. Moe, *Regulatory Performance and Presidential Administration*, 26 AM. J. POL. SCI. 197, 198 (1982).

^{142.} See Aaron L. Nielson, *How Agencies Choose Whether to Enforce the Law: A Preliminary Investigation*, 93 NOTRE DAME L. REV. 1517, 1534 (2018) (explaining that the views of agency officials do not reflect the views of the agency, since practices are not monolithic).

^{143.} Marc L. Miller & Ronald F. Wright, *The Black Box*, 94 IOWA L. REV. 125, 183 (2008).

adjudicator,¹⁴⁴ deciding what punishments are warranted by what conduct, only sporadically subject to meaningful judicial oversight.¹⁴⁵ Insider trading enforcement is no exception. Indeed, given the vague statutory language, questions regarding how law on the books translates into law in action assume even greater importance. Evidence of regular enforcement overreach would be cause for significant concern.

But claims about overly broad interpretation of vague insider trading proscriptions do not match up well with broader academic critiques of securities enforcement, which tend to paint a picture of timid government authorities looking to inflate their enforcement statistics.¹⁴⁶ Rather than pursuing complicated and uncertain cases, critics argue the SEC has strong institutional incentives to pursue low-level targets engaged in obvious wrongdoing.¹⁴⁷ In these accounts, enforcement discretion is largely a principal-agent problem, with the agent (the SEC) maximizing its own interests over those of the principal (the general public).¹⁴⁸ If the principal cannot perfectly monitor the agent, the agent has an incentive to choose sub-optimal enforcement strategies that create the appearance of competent and vigorous performance.¹⁴⁹ Agencies may, for example, select a portfolio of cases that yields the

^{144.} See Rachel E. Barkow, Institutional Design and the Policing of Prosecutors: Lessons from Administrative Law, 61 STAN. L. REV. 869, 871 (2009).

^{145.} See SEC v. Citigroup Glob. Mkts., Inc., 673 F.3d 158, 169 (2d Cir. 2012).

^{146.} See Lemos & Minzner, *supra* note 33, at 876 ("As applied to public enforcement, the upshot is that agencies seeking to build reputations as effective enforcers will tend to emphasize easily measurable accomplishments rather than more amorphous forms of success.").

^{147.} See Macey, supra note 33, at 646 ("Because investigations take time, the SEC focuses on bringing cases that do not require much, if any, investigation.").

^{148.} See Jacob E. Gersen & Matthew C. Stephenson, Over-Accountability, 6 J. LEGAL ANALYSIS 185, 194–202 (2014).

^{149.} See id. at 195.

highest win rate and the most actions filed, even if deterrence might be better served by choosing a different mix of cases.¹⁵⁰

It is not hard to see evidence of principal-agent problems in the SEC's enforcement program. Whenever questions arise about the Commission's legitimacy or competence, SEC officials reliably tout the number of enforcement actions they bring and the aggregate amount of fines and penalties they collect.¹⁵¹ Of course, those metrics do not reveal much about the quality of the SEC's enforcement program, but when those totals exceed the year before. Congress seems more inclined to accede to its budget requests.¹⁵² As Johnathan Macey has noted, this creates an incentive at the Commission to pursue cases that are likely to settle quickly.¹⁵³ The staff even has a name for those actions—"stats point" cases.¹⁵⁴ Viewed in this light, the recent broken windows rhetoric might be little more than an attempt to justify an enforcement program designed to inflate statistics and to create a veneer of vigorous enforcement. Although the SEC claims to devote considerable time and effort to investigating insider trading claims,¹⁵⁵ the current structure of congressional oversight should incentivize it to target cases where the necessary investigation is minimal because much of the legwork has already been undertaken or because liability is so obvious.156

But the preference for quick settlements might be as much about resource constraints as it is about disguising underperformance. The SEC's resource constraints have been

154. See KOLHATKAR, supra note 37, at 153.

^{150.} See Lemos & Minzner, supra note 33, at 876 (explaining that there are strong incentives for agencies to focus on win rates and other quantifiable objectives).

^{151.} See Urska Velikonja, Reporting Agency Performance: Behind the SEC's Enforcement Statistics, 101 CORNELL L. REV. 901, 906 (2016).

^{152.} Id.

^{153.} See Macey, supra note 33, at 646.

^{155.} See Testimony Concerning Insider Trading Before the S. Comm. on the Judiciary, 109th Cong. 2 (2006), https://perma.cc/BWP6-UG8B [hereinafter Testimony Concerning Insider Trading] (statement of Linda Chatman Thomsen, Director, Div. of Enf't, U.S. Sec. & Exch. Comm'n) (highlighting "the ingenuity and perseverance of our staff, and the lengths to which we will go in tracing a fraud").

^{156.} See Macey, supra note 33, at 646.

well documented,¹⁵⁷ and are particularly acute with respect to the agency's capacity to try cases.¹⁵⁸ Trial attorneys make up only 10 percent of the non-supervisory enforcement staff.¹⁵⁹ The SEC has traditionally done a poor job of coordinating the work of its investigative and trial attorneys, with some reports suggesting an often dysfunctional relationship between the groups.¹⁶⁰ An enforcement agency operating under these limitations could easily choose to concentrate on matters that are likely to settle.¹⁶¹

Individual SEC enforcement attorneys and prosecutors are subject to their own agency costs, and these incentives have likewise figured prominently in the academic literature. The most simplistic explanation is the familiar "revolving door" argument, in which SEC officials take a light touch with regulated entities in order to increase their chances for lucrative post-government employment.¹⁶² The crude version of that

159. See id. at 18.

160. See U.S. GOV'T ACCOUNTABILITY OFF., SECURITIES AND EXCHANGE COMMISSION: IMPROVING PERSONNEL MANAGEMENT IS CRITICAL FOR AGENCY'S EFFECTIVENESS 36 (2013), https://perma.cc/26PR-WR6T (PDF) ("Although the agency has taken efforts to improve its intra-agency communication and collaboration, staff continued to identify barriers to effective communication and collaboration among the divisions, within the divisions, and between staff and management, contrary to collaborative best practices.").

161. See Richard A. Posner, *The Behavior of Administrative Agencies*, 1 J. LEGAL STUD. 305, 311 (1972) ("[A] perfectly rational, utility-maximizing administrative agency will devote a 'disproportionate' amount of its resources to relatively minor cases.").

162. See David Zaring, Against Being Against the Revolving Door, 2013 U. ILL. L. REV. 507, 507. But see Wentong Zheng, The Revolving Door, 90 NOTRE DAME L. REV. 1265, 1265 (2015) (asserting an alternative to the rent-seeking model and stating that the relevant research "either finds no conclusive

^{157.} James D. Cox et al., SEC Enforcement Heuristics: An Empirical Inquiry, 53 DUKE L.J. 737, 757–60 (2003); Jed S. Rakoff, The Financial Crisis: Why Have No High-Level Executives Been Prosecuted?, N.Y. REV. BOOKS (Jan. 9, 2014), https://perma.cc/GW5L-UGRL.

^{158.} See U.S. GOV'T ACCOUNTABILITY OFF., SECURITIES AND EXCHANGE COMMISSION: GREATER ATTENTION NEEDED TO ENHANCE COMMUNICATION AND UTILIZATION OF RESOURCES IN THE DIVISION OF ENFORCEMENT 2 (2009), https://perma.cc/JQ6L-5YVM (PDF) ("[B]oth management and staff said resource challenges have delayed cases, reduced the number of cases that can be brought, and potentially undermined the quality of some cases.").

hypothesis is almost surely inaccurate because prosecutors and SEC enforcement officials often make their names by taking on and winning high-profile cases.¹⁶³ Rather than rent-seeking, many attorneys choose government employment to develop saleable skills and a reputation for legal ability, judgment, and success that will make them valuable in the private sector.¹⁶⁴

While high-profile cases entail substantial potential rewards, they also present substantial risks to this human capital investment. As Samuel Buell notes, "no rational, ambitious lawyer . . . wants to be known as the Captain Ahab of prosecutors, the one who foolishly went after the biggest quarry but failed to land it."¹⁶⁵ The higher the defendant's profile, the more resources he or she brings to the defense, the greater risk of loss the case entails. High-profile defendants in insider trading cases often have the financial resources to litigate aggressively and at length and to retain the most skilled defense counsel available.¹⁶⁶ They often leverage their personal

165. SAMUEL W. BUELL, CAPITAL OFFENSES: BUSINESS CRIME AND PUNISHMENT IN AMERICA'S CORPORATE AGE 189 (2016).

166. See Walter Pavlo, The High Cost of Mounting a White-Collar Criminal Defense, FORBES (May 30, 2013, 7:39 AM), https://perma.cc/K96S-P44Z.

evidence of a capture effect or finds evidence of an opposite effect that the revolving door indeed results in more aggressive, not less aggressive, regulatory actions").

^{163.} See Daniel C. Richman, Federal Criminal Law, Congressional Delegation, and Enforcement Discretion, 46 UCLA L. REV. 757, 812 (1998) (noting that lawyers in U.S. Attorney's Offices often try to advance their careers through "conspicuous litigation victories against well-represented targets"); Rakoff, *supra* note 157 ("[W]hatever small influence the 'revolving door' may have in discouraging certain white-collar prosecutions is more than offset, at least in the case of prosecuting high-level individuals, by the career-making benefits such prosecutions confer on the successful prosecutor.").

^{164.} See Ed deHaan et al., The Revolving Door and the SEC's Enforcement Outcomes: Initial Evidence from Civil Litigation, 60 J. ACCT. & ECON. 65, 66–68 (2015) (asserting that attorneys who left the SEC to join firms specializing in defending SEC enforcement actions were associated with more aggressive enforcement actions at the SEC); Richard T. Boylan, What Do Prosecutors Maximize? Evidence from the Careers of U.S. Attorneys, 7 AM. L. & ECON. REV. 379, 396 (2005) (stating that successful U.S. attorneys are more likely to become federal judges or partners in a large private practice later in their careers).

resources through director and officer liability policies or indemnification provisions, which typically require insurers or the company to advance defense costs.¹⁶⁷ These defendants are likely to attract substantial media attention, magnifying the potential reputational gains or losses.¹⁶⁸ By capitalizing on these factors, defense attorneys can act as a significant check on overly aggressive enforcement efforts.

These advantages accrue before, during, and after trial. Defense lawyers can control and monitor information flows to prosecutors during the investigative phase of a case.¹⁶⁹ Through "conference room litigation"¹⁷⁰ they can meet with prosecutors or use Wells submissions to persuade enforcers that the legal theories or evidence are too weak to support a claim or that they support only a civil one.¹⁷¹ Defendants will have both the incentives and the resources to pursue every avenue of appeal should they lose at trial.

These factors suggest a strong selection effect in enforcement decisions and a potential inverse relationship between the high-profile nature of the case or the defendant and

168. See Beth A. Wilkinson & Steven H. Schulman, When Talk is Not Cheap: Communications with the Media, the Government and Other Parties in High Profile White Collar Criminal Cases, 39 AM. CRIM. L. REV. 203, 204 (2002) ("By definition, media will be involved to some extent in any high-profile case.").

169. See Samuel W. Buell, Criminal Procedure Within the Firm, 59 STAN. L. REV. 1613, 1631 (2007).

170. Buell, *supra* note 36, at 885.

^{167.} See TOM BAKER & SEAN J. GRIFFITH, ENSURING CORPORATE MISCONDUCT: HOW LIABILITY INSURANCE UNDERMINES SHAREHOLDER LITIGATION 42–76 (2010); see also XL Specialty Ins. v. Level Global Invs., L.P., 874 F. Supp. 2d 263, 282 (S.D.N.Y. 2012) (explaining that once an insurer's duty to pay arises, "under a directors and officers liability policy calling for the reimbursement of defense expenses... 'insurers are required to make contemporaneous interim advances of defense expenses" (quoting Fed. Ins. v. Kozlowski, 792 N.Y.S.2d 397, 403 (N.Y. App. Div. 2005))).

^{171.} See DAVID WEISBURD ET AL., CRIMES OF THE MIDDLE CLASSES: WHITE-COLLAR OFFENDERS IN THE FEDERAL COURTS 99 (1991) ("Early legal strategies may include negotiations with the agencies involved, the seeking of civil or out-of-court resolution of the case, and the trading of information in return for favorable treatment from the prosecutor's office."); Gerard E. Lynch, *Our Administrative System of Criminal Justice*, 66 FORDHAM L. REV. 2117, 2125–29 (1998) (explaining how skilled defense attorneys can influence a prosecutor's legal conclusions through "the power of persuasion").

the strength of the evidence or novelty of the legal theories. All things being equal, rational enforcement attorneys should view cases against high-profile, well-resourced targets as high risk-reward investments. On average, it should only be rational for risk-averse attorneys to pursue them when the evidence of liability or guilt is overwhelming and when the legal standards are certain.

An example is the recent prosecution of Rajat Gupta.¹⁷² Gupta, a member of the Goldman Sachs board, learned that Warren Buffet was about to make a substantial investment in the company.¹⁷³ Coming in the middle of the financial crisis, there was a high probability that the vote of confidence from Buffett would lift the company's stock price.¹⁷⁴ A minute after the board meeting ended. Gupta telephoned his friend, hedge fund founder Raj Rajaratnam, who purchased several hundred thousand shares of Goldman stock.¹⁷⁵ The FBI had previously wiretapped Rajaratnam's phone, and the next day he was heard bragging that he had received a call "saying something good's gonna happen" at Goldman.¹⁷⁶ After he was indicted, Gupta mounted a vigorous defense, spending by some accounts nearly \$30 million, most of it funded by Goldman.¹⁷⁷ He was convicted and has lost multiple appeals.¹⁷⁸ But given the clear evidence and absence of novel legal issues, the case represented precisely the kind of high-profile matter enforcers should be willing to undertake.

Prominent past failures are likely to weigh heavily on the minds of enforcement officials choosing whether to pursue high-profile targets.¹⁷⁹ In the language of behavioral economics, they will be very available and thus over-weighted in calculating

^{172.} See United States v. Gupta, 747 F.3d 111 (2d Cir. 2014).

^{173.} See id. at 117.

^{174.} See id.

^{175.} *Id*.

^{176.} *Id.* at 128.

^{177.} See Peter Lattman, Goldman Stuck with a Defense Tab, and Awaiting a Payback, N.Y. TIMES (June 18, 2012, 8:35 PM), https://perma.cc/4VSW-TA4V.

^{178.} See Gupta v. United States, 913 F.3d 81, 88 (2d Cir. 2019).

^{179.} See Daniel Kahneman et al., Experimental Tests of the Endowment Effect and the Coase Theorem, 98 J. POL. ECON. 1325, 1326 (1990).

probabilities.¹⁸⁰ The counterexample to Gupta is the SEC's failed enforcement action against Mark Cuban.¹⁸¹ The SEC alleged that Cuban, a minority stockholder in an internet start-up, learned from the company's CEO about an impending PIPE transaction, which would cause the company's stock price to decline.¹⁸² Cuban allegedly acknowledged that he could not sell his stock before the deal was announced but did so anyway.¹⁸³

Unlike the case against Gupta, where it was clear that a director owed a fiduciary duty to maintain the confidentiality of MNPI, it was far from certain that a simple breach of a confidentiality agreement was enough for liability.¹⁸⁴ Nor was it even certain that such an agreement existed.¹⁸⁵ After a four-year investigation, the SEC nonetheless filed an enforcement action and spent the next five years litigating it.¹⁸⁶ Cuban mounted a vigorous defense, hiring a leading securities attorney and reportedly spending more in legal fees than the estimated potential fines he would have incurred had he settled.¹⁸⁷ The district court originally dismissed the complaint, only to have the Fifth Circuit reverse.¹⁸⁸ A jury ultimately found Cuban not liable.¹⁸⁹ That outcome was widely reported in the media, as were Cuban's claims that the SEC tried to "bully" him into settlement.¹⁹⁰ Cuban's complaints led to an internal

^{180.} See id.

^{181.} See generally SEC v. Cuban, 620 F.3d 551 (5th Cir. 2010).

^{182.} *Id.* at 552.

^{183.} *Id.*

^{184.} See Robert A. Prentice, Permanently Reviving the Temporary Insider, 36 J. CORP. L. 343, 363 (2011).

^{185.} See Cuban, 620 F.3d at 552.

^{186.} See Jana J. Pruet, Billionaire Mark Cuban Cleared of Insider Trading; Blasts U.S. Government, REUTERS (Oct. 16, 2013, 3:44 PM), https://perma.cc/5L97-EVKA (PDF).

^{187.} See id.

^{188.} Cuban, 620 F.3d at 558.

^{189.} Pruet, *supra* note 186.

^{190.} See id.

investigation of the attorneys.¹⁹¹ High-profile failures like this one can reasonably be expected to cause enforcers to take a cautious approach to prominent targets, especially in cases where the evidence is not overwhelming or where the legal theory is untested.

Indeed, a 2013 Government Accountability Office study reported precisely this kind of risk-averse environment at the SEC.¹⁹² Contrary to Jill Fisch's view about the benefits of the law-making partnership in insider trading, cautious agency personnel often chose not to pursue "cases that address evolving market practices or developments with little precedent "¹⁹³ Layers of review slowed cases and "created an atmosphere of fear and insecurity, and may have created incentives for staff to drop cases or narrow the scope of review."194 A majority of surveyed SEC employees agreed that a "fear of public scandals has made the SEC overly cautious and risk averse."195 A 2010 report by the SEC Office of Inspector General came to similar conclusions, finding that the "arduous process of getting the SEC staff's approval in Washington, DC to recommend an Enforcement action" led staff to "focus on easier cases, the 'quick hits.""196

These dynamics create a quite different risk-return calculation for lower profile targets. With fewer resources to litigate and perhaps lower stakes, these defendants will face greater pressure to settle.¹⁹⁷ Indeed, these defendants are in a position far closer to that facing the typical street criminal than

193. Id. at 17.

194. Id.

195. *Id.* at 16 tbl.5.

196. U.S. SEC. & EXCH. COMM'N OFF. INSPECTOR GEN., INVESTIGATION OF THE SEC'S RESPONSE TO CONCERNS REGARDING ROBERT ALLEN STANFORD'S ALLEGED PONZI SCHEME 124, 129 (2010), https://perma.cc/7UHX-AF2J (PDF).

197. See Sarah Ribstein, Note, A Question of Costs: Considering Pressure on White-Collar Criminal Defendants, 58 DUKE L.J. 857, 860 (2009).

^{191.} See U.S. SEC. & EXCH. COMM'N OFF. INSPECTOR GEN., ALLEGATIONS OF ENFORCEMENT STAFF MISCONDUCT IN INSIDER TRADING INVESTIGATION 82–89 (2011) https://perma.cc/CR8A-THW3 (PDF).

^{192.} See U.S. GOV'T ACCOUNTABILITY OFF., supra note 160, at 15 ("[S]enior officers and staff surveyed remarked that recent enforcement failures and related, sustained criticism . . . has contributed to their unwillingness to take risk and innovate.").

the well-resourced white collar one. Aggressive enforcement tactics are less risky in these cases because they are unlikely to garner significant media attention. Under these circumstances, enforcers might be willing to pursue more novel interpretations of legal standards, which may rarely be tested in court if these cases settle disproportionately. Although civil settlements or plea agreements have no precedential value, critics worry that settlements involving novel legal theories will nonetheless shift liability standards.¹⁹⁸ The net effect will be an incremental broadening of insider trading doctrine.

This risk-reward relationship is reinforced by the biases and heuristics of individual enforcement attorneys. Myopic loss aversion and narrow framing can lead individuals acting within organizations to be overly cautious in the initiatives they undertake.¹⁹⁹ The \mathbf{SEC} opens around one thousand investigations a year, each of which is best viewed as a risky capital investment project.²⁰⁰ On an agency wide scale, the SEC should have strong incentives to include some risky, high-profile cases in its portfolio. Not all of them will succeed, but those that do can be expected to have a strong deterrent effect.²⁰¹ Even if the probability of getting caught for insider trading is low, high-profile prosecutions will be very available to market participants. The ease of recalling these cases may lead them to overestimate probabilities of a successful enforcement action, enhancing the SEC's deterrence goals. Leveraging the availability heuristic not only provides a rationale for bringing high-profile cases likely to draw media attention, it also justifies crackdowns, which have a similar effect.²⁰² These factors help

202. See Sohoni, supra note 139, at 33.

^{198.} See Matthew C. Turk, Regulation by Settlement, 66 U. KAN. L. REV. 259, 260–61 (2017).

^{199.} See Daniel Kahneman & Dan Lovallo, *Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking*, 39 MGMT. Sci. 17, 18–24 (1993).

^{200.} See U.S. SEC. & EXCH. COMM'N, DIVISION OF ENFORCEMENT: 2019 ANNUAL REPORT 14 (2019), https://perma.cc/Y937-8X8L (PDF).

^{201.} See Christine Jolls et al., A Behavioral Approach to Law and Economics, 50 STAN. L. REV. 1471, 1538 (1998) (explaining how making law enforcement highly visible can deter crime because "individuals tend to judge the likelihood of certain events (such as getting caught for a crime) by how available such instances are to the human mind").

explain the SEC's penchant for insider trading cases involving public figures or unusual or entertaining facts, which are likely to appeal to reporters.

Individual enforcement attorneys likely have a different calculus. If on average enforcement attorneys weigh potential losses more heavily than potential gains, they will have strong incentives to take on only cases that they believe have a strong likelihood of winning.²⁰³ Defense attorneys can exploit this natural loss aversion by focusing on the potential weaknesses in the government's case. For example, government attorneys apparently re-evaluated their decision to bring charges against Steven Cohen after defense counsel's exhaustive analysis of the weaknesses in the government's evidence.²⁰⁴

Enforcers may anticipate these problems before they arise, leading to wholesale shifts in which cases they choose to investigate. Government attorneys unwilling to take too many risks (or speculating that the risks of pursuing large, high-profile cases will be insuperable) may not even try, shifting their efforts to investigating and settling many small cases. Shirking agents may pursue easy cases or those in which much of the investigative work has already occurred. This is likely a bigger problem for career enforcers, but even those looking to return to the private sector might be drawn to these matters. Small cases may not have as much potential to enhance their reputations but investigating and settling them could still signal to future employers that the attorney possesses substantial skills, all without the risk of a high-profile failure.

The pressure to choose the least risky option does not diminish (and may in fact intensify) where probabilities of success are difficult to assess *ex ante* and where supervisors will review the individual's decisions frequently under less than certain metrics.²⁰⁵ If the results of investigations were aggregated and attorneys' overall success rate was the only measure of performance, attorneys might be willing to take

^{203.} See Kahneman et al., supra note 179, at 1326.

^{204.} See KOLHATKAR, supra note 37, at 239–44 (detailing Cohen's attorneys' strategy to focus "on the government's weak spot: its crippling fear of losing a big case").

^{205.} See Richard H. Thaler et al., The Effect of Myopia and Loss Aversion of Risk Taking: An Experimental Test, 112 Q. J. ECON. 647, 648 (1997).

greater risks. But it will be difficult for the Commission to send credible signals to its employees that investigations that do not lead to an enforcement action or that lead to a Commission loss will not count against them.²⁰⁶ Indeed, since supervisors will view staff attorneys' decisions in hindsight, there is a substantial risk that they will attribute those outcomes to either poor decision-making or poor lawyering. The risk of hindsight bias will push attorneys toward cases that seem obvious at the outset. This will especially be so when the attorney who took the risky case is viewed in the context of her more conservative colleagues. In a world where the convention is to make the safe choice, blame for excessive risk taking is more likely for the individual bucking that norm.²⁰⁷

Are government officials timid enforcers who are only willing to pursue clear-cut and obvious cases of insider trading or aggressive ones who regularly stretch the bounds of legal doctrine to bring unwarranted claims? Who are the targets of those cases? Are they the market elites of popular rhetoric or are do they tend to be less well-resourced and lower profile traders? Do market participants have sufficient notice of the kinds of behavior that lead to civil or criminal charges? Answering these questions without hard empirical data is difficult because enforcers are subject to a wide variety of incentives, which in many cases work at cross purposes. Focusing on just one incentive in isolation (for example, the desire for individual enforcers to build human capital) might lead to a prediction that attorneys will aggressively pursue high-profile insider trading cases with novel legal theories. Picking others (such as institutional incentives to maximize enforcement statistics and individual loss aversion) might lead to the opposite prediction.

In the current, largely anecdotal debate, it has been easy to cherry pick individual cases of prosecutorial overreach, cases of

^{206.} See U.S. GOV'T ACCOUNTABILITY OFF., supra note 160, at 36 (explaining that during the time period under study, SEC employees had low morale, a high distrust of management, and expressed concerns about the uncertain link between their actual and rated performance).

^{207.} See DANIEL KAHNEMAN, THINKING, FAST AND SLOW 347 (2011) (demonstrating that judgmental observers tend to assign more blame to the habitual risktaker than non-risktakers).

obvious but comparatively minor wrongdoing that settle quickly, or cases that articulated an aggressive vision of some element of an insider trading claim. But to properly evaluate how enforcement actually operates requires a more systematic analysis of which cases prosecutors and the SEC actually bring and how those cases are resolved.

IV. The Dataset

To analyze real insider trading, I compiled a hand-collected sample of insider trading cases filed in SEC fiscal years 2011 to 2015 (October 1, 2010 to September 30, 2015). Cases were identified using the SEC's *Select SEC and Market Data* report, which lists enforcement actions organized by type.²⁰⁸ As Urska Velikonja's research has demonstrated, however, these reports are highly unreliable for identifying the true level of SEC enforcement activity because the SEC is inconsistent in how it structures its actions.²⁰⁹ In some cases, it names all individuals in a single civil complaint or administrative proceeding; in others, it files separate actions against each defendant.²¹⁰ Inconsistencies abound in how the SEC classifies its cases.²¹¹

To avoid these inconsistencies the unit of analysis in this study is the individual defendant.²¹² For each defendant identified in an SEC enforcement action, I collected data to determine whether that same defendant was the subject of a parallel criminal action.²¹³ Any additional defendants named in criminal actions that were not previously identified in SEC actions were added to the database. For a case to be included, there had to be an insider trading claim. Thus, an

^{208.} See Reports and Publications, U.S. SEC. & EXCH. COMM'N, https://perma.cc/G97W-872H (listing enforcement actions).

^{209.} Velikonja, *supra* note 151, at 950.

^{210.} See id.

^{211.} See *id*. (explaining that case categorization is within the discretion of the enforcement staff at the first instance, and then reviewed by the Office of the Secretary, which can lead to inconsistencies in categorization from year to year).

^{212.} Relief defendants were excluded from the analysis.

^{213.} Criminal enforcement actions were identified in a number of ways, including searches for Department of Justice press releases, media articles, and docket searches.

administrative failure to supervise claim and criminal indictments alleging obstruction of justice were not included in the sample.²¹⁴ I also omitted cases against unknown purchasers of securities, which typically seek to freeze assets, but do not allege enough details about the underlying claim for proper analysis.

Members of the same insider trading network might be sued or indicted over a multi-year period. To ensure that each member of a network was included in the dataset, I added any cases filed before FY 2011 and after FY 2015 if they involved insider trading episodes enforced during the study period.²¹⁵ The earliest cases in the dataset are thus from FY 2008. Every effort was made to identify all insider trading cases; there is no evidence that the data collection methodology biased the sample in any way. The case selection process yielded a total of 465 defendants in the dataset.

The database compiles three categories of information regarding each defendant: (1) litigation characteristics; (2) defendant characteristics; and (3) the nature of the allegations. Litigation specific information, such as filing dates and outcomes, were collected for each identified proceeding.

A more detailed description of the variables analyzed appears in the data appendix. Insider trading enforcement can occur in three forums: (1) criminal enforcement in federal court; (2) civil enforcement in the same venue; and (3) proceedings brought before administrative law judges (ALJs).²¹⁶ Cases with

^{214.} See, e.g., Indictment at 3–4, United States v. McClellan, 10-cr-00860 (N.D. Cal. Nov. 24, 2010), ECF No. 1 (indictment for obstruction of justice).

^{215.} Earlier cases were not included in the sample if the only action in the study period was a follow-on administrative proceeding against a regulated person. *See, e.g.*, Holzer, Exchange Act Release No. 63822, 2011 SEC LEXIS 595 (Feb. 2, 2011).

^{216.} See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 11-203, § 929P(a), 124 Stat. 1376, 1862–65 (2010) (codified at 15 U.S.C. § 78t(e)) (empowering the SEC to obtain civil penalties against non-regulated persons in administrative proceedings). The use of ALJs and the shift of traditional civil enforcement actions to administrative proceedings have been controversial. See Lucia v. SEC, 138 S. Ct. 2044, 2051 (2018) (finding method for appointing ALJs unconstitutional); see generally Stephen J. Choi & A.C. Pritchard, The SEC's Shift to Administrative Proceedings: An

some sort of criminal enforcement make up 39.8 percent of the sample.²¹⁷ Table 1 reports descriptive statistics for the sample and shows significant differences between cases with and without criminal enforcement.

m 11

-

	Table 1					
Descriptive Statistics						
	Civil Enforcement Only	Criminal Enforcement	p- value			
	(n = 280)	(n = 185)				
A. Litigation Characteristics						
FINRA			0.068			
No	110 (41.0%)	92 (49.7%)				
Yes	158 (59.0%)	93 (50.3%)				
FBI			< 0.001			
No	210 (78.4%)	42 (22.7%)				
Yes	58 (21.6%)	143 (77.3%)				
ORSA			0.005			
No	201 (75.0%)	116 (62.7%)				
Yes	67 (25.0%)	69 (37.3%)				
SEC Market Abuse			0.005			
No	227 (84.7%)	137 (74.1%)				
Yes	41 (15.3%)	48 (25.9%)				
Lag (Days)	1180.450 (566)	1064.708 (550)	0.033			
Case Length (Days)	250.656 (410)	625.285 (489)	< 0.001			
Enforcement Type			< 0.001			
Civil	221 (78.9%)	0 (0.0%)				
Criminal	0 (0.0%)	7 (3.8%)				

Empirical Assessment, 34 YALE J. ON REG. 1 (2017); Alexander I. Platt, *SEC Administrative Proceedings: Backlash and Reform*, 71 BUS. LAW. 1 (2016). Still, it is important to keep those controversies in perspective; defendants in stand-alone administrative actions were less than 7 percent of all defendants. *See infra* Table 1.

217. Defendants facing all three types of enforcement are overwhelmingly (70.8 percent) SMPs. Most administrative proceedings are follow-on actions to bar defendants from the securities industry or, for non-SMPs, to bar them from appearing or practicing before the Commission. *See* 17 C.F.R. § 201.102(e) (2020).

	Civil Enforcement Only	Criminal Enforcement	p- value
SEC Administrative	29 (10.4%)	0 (0.0%)	
Civil and Criminal	0 (0.0%)	112 (60.5%)	
Civil and Administrative	30 (10.7%)	0 (0.0%)	
Civil Criminal	O(O(0)/)	CO (04 10/)	
Administrative	0 (0.0%)	63 (34.1%)	
Criminal and			
Administrative	0 (0.0%)	3 (1.6%)	
B. Defendant Characteristics	5		
Defendant Type			< 0.001
Officer & Director	36 (12.9%)	12 (6.5%)	
Other Employee	41 (14.6%)	30 (16.2%)	
SMP	32 (11.4%)	68 (36.8%)	
Lawyer	5 (1.8%)	8 (4.3%)	
Other Professional	20 (7.1%)	10 (5.4%)	
Friends and Family	125 (44.6%)	52 (28.1%)	
Other	21 (7.5%)	5 (2.7%)	
Gender			0.051
Male	261 (93.2%)	180 (97.3%)	
Female	19 (6.8%)	5 (2.7%)	
Direct Profit (000s 2016 Dollars)	1,105.62 (9195)	817.97 (2750)	0.68
Downstream Profit (000s			
2016 Dollars)	1,555.37 (17235)	7,046.95 (24318)	0.005
C. Nature of Allegations			
Basis of Liability			< 0.001
Trading	88 (31.4%)	13 (7.0%)	
Tipping Only	33 (11.8%)	58 (31.4%)	
Trading after Tip Only	102 (36.4%)	49 (26.5%)	
Trading and Tipping	57 (20.4%)	65 (35.1%)	
# of IT Events	2.600 (12)	5.098 (7)	0.010
Network Size	3.929 (3)	7.432 (5)	< 0.001

	Civil Enforcement Only	Criminal Enforcement	p- value
Common Shares	169 (60.4%)	64 (34.6%)	
Options or Other Derivatives	35 (12.5%)	26 (14.1%)	
No Trading	34 (12.1%)	54 (29.2%)	
Common Shares & Options	42 (15.0%)	41 (22.2%)	
Concealment/Obstruction			< 0.001
No	239 (85.4%)	115 (62.2%)	
Yes	41 (14.6%)	70 (37.8%)	
Level			0.012
0	99 (35.4%)	52 (28.1%)	
1	113 (40.4%)	68 (36.8%)	
2	55 (19.6%)	41 (22.2%)	
3	7 (2.5%)	17 (9.2%)	
4	5 (1.8%)	7 (3.8%)	
5	1 (0.4%)	0 (0.0%)	
MNPI			0.003
Financial Information	44 (15.7%)	54 (29.2%)	
M & A Activity	200 (71.4%)	113 (61.1%)	
Product Approval	13 (4.6%)	10 (5.4%)	
Other	23 (8.2%)	8 (4.3%)	
Industry			< 0.001
Automotive	1 (0.4%)	3 (1.6%)	
Aviation	6 (2.1%)	0 (0.0%)	
Banking & Financial Services	17 (6.1%)	6 (3.2%)	
Biotechnology	46 (16.4%)	39 (21.1%)	
Chemicals	9 (3.2%)	0 (0.0%)	
Food & Beverage	13 (4.6%)	1 (0.5%)	
Healthcare	7 (2.5%)	1 (0.5%)	
Hospitality & Tourism	13 (4.6%)	2 (1.1%)	
Insurance	24 (8.6%)	2 (1.1%)	
IT & High Technology	62 (22.1%)	82 (44.3%)	
Media	1 (0.4%)	1 (0.5%)	
Medical Equipment	17 (6.1%)	16 (8.6%)	
Metal Works	11 (3.9%)	8 (4.3%)	
Mining	3 (1.1%)	0 (0.0%)	
Oil & Gas	11 (3.9%)	4 (2.2%)	

	Civil Enforcement Only	Criminal Enforcement	p- value
Pharmaceuticals	3 (1.1%)	1 (0.5%)	
Property & Development	7 (2.5%)	0 (0.0%)	
Retail	16 (5.7%)	3 (1.6%)	
Shipping	1 (0.4%)	5 (2.7%)	
Telecommunications	5 (1.8%)	2 (1.1%)	
Apparel & Textiles	1 (0.4%)	6 (3.2%)	
Other	6 (2.1%)	3 (1.6%)	
Duty			0.46
N/A	205 (73.2%)	139 (75.1%)	
Employment	32 (11.4%)	26 (14.1%)	
Family Relationship	13 (4.6%)	2 (1.1%)	
Friendship	7 (2.5%)	3 (1.6%)	
Confidentiality Agreement	8 (2.9%)	4 (2.2%)	
Traditional Fiduciary	12 (4.3%)	10 (5.4%)	
Other	2 (0.7%)	1 (0.5%)	
Unknown	1 (0.4%)	0 (0.0%)	

Note: For sources and descriptions of variables, see data appendix. For categorical data, parentheticals are percent of total. For continuous data, parentheticals are standard deviations. Due to missing data, not all categories total to 465.

V. Materiality in Insider Trading Cases

To analyze the claim that enforcers stretch doctrinal boundaries, I begin with the most rudimentary requirement of any insider trading case. To prevail, enforcers must show the defendant possessed MNPI.²¹⁸ Materiality is governed, for the most part, by flexible, case-specific standards. Courts generally define information as material if either "there is substantial likelihood that a reasonable shareholder would consider it important" in buying or selling the security or if there is a substantial likelihood that the information "would have been viewed by the reasonable investor as having significantly

^{218.} See 17 C.F.R. § 240.10b5-1 (2020).

altered the 'total mix' of information made available."²¹⁹ When that information is speculative or contingent, materiality judgments require "a balancing of both the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity."²²⁰ Both the SEC²²¹ and courts²²² have consistently rejected rules of thumb and bright-line rules in favor of a fact-specific, case-by-case assessment.²²³

Insider trading critics argue that flexible standards create substantial uncertainties for market participants²²⁴ and allow enforcement officials to stretch the proper boundaries of insider trading doctrine.²²⁵ The "lack of a clear and objective standard," John Anderson writes, "permits almost any information to be deemed material for purposes of insider trading liability."²²⁶ Professor Anderson suggests that the SEC has resisted efforts

^{219.} TSC Indus. v. Northway, Inc., 426 U.S. 438, 449 (1976).

^{220.} Basic, Inc. v. Levinson, 485 U.S. 224, 238 (1988) (citing SEC v. Tex. Gulf Sulphur Co., 401 F.2d 833, 849 (2d. Cir. 1968) (en banc), *cert. denied*, 394 U.S. 976 (1969)).

^{221.} See SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45,150 (Aug. 19, 1999) (rejecting the use of a 5 percent threshold in determining the materiality of misstatements or omissions in financial statements).

^{222.} See Matrixx Initiatives, Inc. v. Siracusano, 563 U.S. 27, 39–40 (2011) (rejecting a bright-line rule that reports of adverse events associated with a pharmaceutical company's products cannot be material absent a statistically significant risk that the product is causing the events); *Basic*, 485 U.S. at 237–39 (rejecting a bright-line rule that preliminary merger negotiations are material only when the parties reach an agreement in principle).

^{223.} See Basic, 485 U.S. at 239 ("Whether merger discussions in any particular case are material... depends on the facts.").

^{224.} See Joan MacLeod Heminway, Materiality Guidance in the Context of Insider Trading: A Call for Action, 52 AM. U. L. REV. 1131, 1135 (2003) [hereinafter Heminway, Materiality Guidance] ("[T]he imprecise existing legal standard defining what is 'material' makes it difficult for those issuers, directors and officers to understand their legal obligations.").

^{225.} See Peter J. Henning, What's so Bad About Insider Trading Law?, 70 BUS. LAW. 751, 771–72 (2015) (arguing that the flexible materiality definition "allows the prohibition to be applied to new types of data that have not been subject to prosecutions before and to reach persons far removed from the traditional corporate world").

^{226.} ANDERSON, *supra* note 18, at 62; *see* Henning, *supra* note 225, at 771 (claiming that "[j]ust about any nugget of information could conceivably fit" the materiality definition).

to clarify materiality because the current flexible standard facilitates its enforcement efforts and those of prosecutors.²²⁷ Others have urged the Commission or judges to adopt safe harbor provisions, bright-line rules, or presumptions to address these uncertainties.²²⁸

Although commentators raise a host of objections, two related problems are central to complaints about materiality. The heart of the issue is the hindsight bias problem inherent to all materiality determinations.²²⁹ Enforcers and ultimately juries will only assess materiality if the information led to a profitable trade.²³⁰ But what seems certain in hindsight may not have been so clear when the trading decision occurred.²³¹ Critics also complain that courts bootstrap—that they infer materiality from the fact of trading.²³² effectively conflating materiality with a separate element, the purchase or sale of a security.²³³

231. See STEPHEN M. BAINBRIDGE, INSIDER TRADING LAW AND POLICY 67 (2014) (discussing the importance of determining when the information in question became material); see also Richard C. Sauer, *The Erosion of the Materiality Standard in the Enforcement of the Federal Securities Laws*, 62 BUS. LAW. 317, 323 (2007) (explaining the role of predictions in trading decisions).

232. See SEC v. Tex. Gulf Sulphur Co., 401 F.2d 833, 851 (2d. Cir. 1968) (en banc) (explaining that "a major factor in determining whether" information is material "is the importance attached to the [information] by those who knew about it," and that an insider's choice to trade alone can serve as an indication of such importance).

233. See BAINBRIDGE, supra note 231, at 68 ("If the allegedly illegal trade proves that the information is material, the materiality requirement becomes meaningless because all information in the defendant's possession when he or she traded would be material."); see also Blue Chip Stamps v. Manor Drug

^{227.} See ANDERSON, supra note 18, at 62 ("Such flexibility can be quite useful to the SEC and prosecutors. Consequently, it should come as no surprise that the SEC has openly resisted efforts to bring greater clarity to the definition of materiality.").

^{228.} See Heminway, *Materiality Guidance*, *supra* note 224, at 1135 (suggesting the "expanded use of *per se* rules, presumptions, and safe harbor provisions").

^{229.} See G. Mitu Gulati et al., Fraud by Hindsight, 98 Nw. U. L. Rev. 773, 788 (2004).

^{230.} See *id.* at 774 ("Hindsight blurs the distinction between fraud and mistake. People consistently overstate what could have been predicted after events have unfolded \dots ").

Is there evidence that these are widespread problems? Critics largely focus on the possibility that enforcers could exploit current standards, and there is no doubt that they are right about that possibility. But there is little evidence enforcers actually do so in practice.

As Table 2 shows, two types of MNPI dominate in the 465 insider trading cases in the dataset: (1) information about impending M&A activity, which appears in two-thirds of enforcement actions against individual defendants;²³⁴ and (2) financial information (typically unannounced quarterly results), alleged in slightly more than 20 percent of cases. The only other category that appears with any frequency is information about product approvals or testing, usually information involving new drug applications, which appears in about 5 percent of cases. In total, over 93 percent of insider trading cases involve one of these three categories of MNPI.

Table 2 Nature of MNPI

	Overa	all	Non-	Criminal	Crim	inal
M & A Activity	313	(67.31)	200	(71.43)	113	(67.31)
Financial Information	98	(21.08)	44	(15.71)	98	(21.08)
Product Approval	23	(4.95)	13	(4.64)	23	(4.95)
Other	31	(6.67)	823	(8.21)	31	(6.67)
Total	465		280		185	

Note: For data definitions and sources see Data Appendix. Numbers in parentheses are column percentages.

1688

Stores, 421 U.S. 723, 729 (1975) (providing that disclosure of material information and the purchasing or selling a security are two separate elements of insider trading).

^{234.} Although these percentages have shifted over the years, there is a remarkable consistency in the cases enforcers pursue. A study of SEC enforcement actions in the 1980s found that nearly 80 percent involved M&A activity, with another 8 percent focused on earnings information. Lisa K. Meulbroek, *An Empirical Analysis of Illegal Insider Trading*, 47 J. FIN. 1661, 1670 (1992).

All three share an important characteristic—in the majority of cases there is little doubt about materiality. In the terminology of recent insider trading cases. thev overwhelmingly involved "black edge," information that is clearly material and nonpublic and which creates a substantial risk of liability.²³⁵ These data are consistent with a theory of enforcement risk aversion-cases involving obvious MNPI will be far less risky to pursue.²³⁶ Indeed, by focusing their efforts on these cases, enforcers appear to have adopted in practice precisely the constrained materiality standard that critics have sought. Nor does this restricted view seem like a recent phenomenon. As James Park has noted, some early insider trading decisions focused their discussions of materiality on information that was "extraordinary in nature" and "reasonably certain to have a substantial effect on the market price of the security."237

The three types of cases that predominate in insider trading enforcement actions are discussed in greater detail below.²³⁸

A. M&A Cases

Under *Basic*'s probability-magnitude test, M&A transactions are usually significant events, especially for the company being acquired, even if their probability is low.²³⁹ For

^{235.} See KOLHATKAR, supra note 37, at 106 ("If traders came into possession of this sort of information, the stock should be restricted immediately—at least in theory.").

^{236.} See supra notes 179–180 and accompanying text.

^{237.} James J. Park, *Insider Trading and the Integrity of Mandatory Disclosure*, 2018 WIS. L. REV. 1133, 1183 (citing SEC v. Bausch & Lomb Inc., 565 F.2d 8, 14 (2d Cir. 1977)).

^{238.} The cases in the Other category also generally involve clearly material information. *See, e.g.*, Geist, Exchange Act Release No. 73581, 2014 SEC LEXIS 4316 (Nov. 12, 2014) (award of U.S. Army contract); SEC Charges Former BP Employee with Insider Trading During the Deepwater Horizon Oil Spill, Litigation Release No. 22975, 2014 SEC LEXIS 1352 (Apr. 17, 2014) (extent of BP Deepwater Horizon oil spill).

^{239.} See Basic, Inc. v. Levinson, 485 U.S. 224, 238 (1988) ("Since a merger in which it is bought out is the most important event that can occur in a small corporation's life . . . inside information . . . can become material at an earlier stage than [it would in] lesser transactions" (quoting SEC v. Geon Indus., 531 F.2d 39, 47–48 (1976)).

82.7 percent of the defendants who traded on MNPI about an impending transaction, the information in their possession involved the company's acquisition. In many of these cases, the acquisition target was a relatively small public company being acquired by a substantially larger one. The transaction typically had advanced reasonably far, increasing the chances that it would occur. In these circumstances, it was not difficult for the defendants to anticipate a large price impact on disclosure. These are not cases of materiality by hindsight.

The trading surrounding General Electric's acquisition of Vital Signs, Inc. provides a typical example.²⁴⁰ In 2008, Vital Signs was a medical equipment manufacturer with a market capitalization of under \$1 billion.²⁴¹ A Vital Signs executive vice president helped negotiate the acquisition and signed a non-disclosure agreement.²⁴² After the companies agreed on terms, he tipped the acquisition price to his cousin, a registered representative, who in turn tipped five others.²⁴³ Vital Signs' stock price increased 26 percent on the day the deal was announced.²⁴⁴ There was nothing uncertain about materiality in this case. Numerous other enforcement actions are factually similar.²⁴⁵

^{240.} SEC Charges Eight Individuals with Making \$450,000 from Insider Trading in Vital Signs, Inc., Litigation Release No. 22205, 2011 SEC LEXIS 4498 (Dec. 21, 2011).

^{241.} Scott Malone, *GE to Acquire Vital Signs for \$860 Million Cash*, REUTERS (July 24, 2008, 7:37 AM), https://perma.cc/2HQZ-2M6J (PDF).

^{242.} Complaint ¶ 2, SEC v. Easom, No. 11-cv-7314 (D.N.J. Dec. 11, 2011), ECF No. 1.

^{243.} See id. $\P\P$ 2–3.

^{244.} See id. ¶ 2.

^{245.} See, e.g., SEC Charges Five Physicians with Insider Trading in Stock of Medical Professional Liability Insurer, Litigation Release No. 22413, 2012 SEC LEXIS 2135 (July 10, 2012) (chairman shared acquisition information with family members and friends); SEC Charges Biotech Employee, Two Stockbrokers with Insider Trading on Nonpublic Information About Pharmaceutical Trials and Merger, Litigation Release No. 23279, 2015 SEC LEXIS 2284 (June 9, 2015) (executive tipped brother-in-law about company's acquisition); SEC Charges Former Loan Officer with Oak Hill Financial, Inc. and Three Others with Insider Trading, Litigation Release No. 22234, 2012 SEC LEXIS 237 (Jan. 24, 2012) (employee tipped friend about impending acquisition).

One reason that M&A cases predominate in enforcement actions is because of the methods the SEC and SROs use to detect insider trading. A substantial number of the SEC's M&A cases come from FINRA market surveillance, which operates the Insider Trading Surveillance Group within its Office of Fraud Detection and Market Intelligence (OFDMI).²⁴⁶ When SROs identify cases with suspicious trading, they refer those cases to the SEC for further potential investigation.²⁴⁷

While enforcement officials tend to be discreet regarding the inner workings of their algorithms, available information indicates that their analyses are typically tied to significant corporate announcements.²⁴⁸ While any corporate event can potentially be material, data surrounding M&A transactions is often regarded by regulators as the most material and the most likely to result in insider trading.²⁴⁹ FINRA opens investigations after more than 90 percent of announced mergers.²⁵⁰ As it describes the process: "When a major announcement comes out, the OFDMI team can go back and see if the software picked up any unusual movements in the stock prices of the companies involved."²⁵¹ As a result, 65.9 percent of the cases involving

^{246.} See Catching the Bad Guys: Inside FINRA's Office of Fraud Detection and Market Intelligence, FINRA (Sept. 3, 2015), https://perma.cc/5S2H-ZNWT [hereinafter Catching the Bad Guys] (exploring the "inner workings" of OFDMI); Mary Jo White, Chair, Sec. & Exch. Comm'n, Speech: All-Encompassing Enforcement: The Robust Use of Civil and Criminal Actions to Police the Markets (Mar. 31, 2014), https://perma.cc/W7ZF-88PN (stating that many insider trading cases start out as a referral from FINRA); see also L. HILTON FOSTER, U.S. SEC, INSIDER TRADING INVESTIGATIONS 3–4 (2000), https://perma.cc/57WW-UDF2 (PDF) (reporting the sources of cases). All of these investigators use data mining techniques to find suspicious trading patterns.

^{247.} See FOSTER, supra note 246, at 3 ("SROs provide the SEC with hundreds of reports of suspicious trading each year.").

^{248.} Id. at 2.

^{249.} Hawke Interview, *supra* note 53.

^{250.} See Ben Protess, For Wall Street Watchdog, All Grunt Work, Little Glory, N.Y. TIMES: DEALBOOK (Dec. 1, 2011, 7:00 PM), https://perma.cc/B3PP-KVGJ (discussing FINRA's role in insider trading prosecutions).

^{251.} Catching the Bad Guys, supra note 246; see How FINRA's Surveillance Helped Score a Hole in One in "Golf Lingo" Insider Trading Case,

M&A activity come, at least in part, from a tip from FINRA. Enforcement officials necessarily evaluate materiality retrospectively, but by limiting their surveillance efforts to cases with these kinds of announcements, there seems to be little risk that hindsight bias will color their materiality judgments.

The materiality of the information at issue in the average enforcement action is apparent from the market reaction when the information is made public. Indeed, information about forthcoming M&A announcements tends to be the most material and, as such, typically receives the most attention from SEC enforcement attorneys looking to build an insider trading case.²⁵² Even critics of insider trading enforcement agree that such market reactions are the "most objective evidence of materiality."²⁵³ While the absence of a market reaction might be due to a number of factors,²⁵⁴ a substantial market reaction is strong evidence that the disclosed information is material.²⁵⁵

Much like securities class action attorneys, the SEC uses market reaction as a screen in choosing which investigations to pursue. Former enforcement officials report that the SEC generally looks for cases with price movements of 10 percent or more as a proxy for materiality.²⁵⁶ The existence of this kind of screen is borne out in the data. Kenneth Ahern examined stock returns in insider trading cases and found that enforcers tend to focus on cases that exhibit large post-disclosure returns.²⁵⁷ Ahern found that enforcement cases involving corporate deals

- 252. Hawke Interview, *supra* note 53.
- 253. Sauer, *supra* note 231, at 323.

254. See generally Jill E. Fisch et al., *The Logic and Limits of Event Studies in Securities Fraud Litigation*, 96 TEX. L. REV. 553 (2018).

- 255. See Oran v. Stafford, 226 F.3d 275, 282 (3d Cir. 2000).
- 256. FOSTER, *supra* note 246, at 4.

257. Kenneth R. Ahern, Information Networks: Evidence from Illegal Insider Trading Tips, 125 J. FIN. ECON. 26, 45 (2017); Patrick Augustin et al., Informed Option Trading Prior to M&A Announcements: Insider Trading?, 65 MGMT. SCI. 5697, 5717 (2019) (showing a positive correlation between cumulative abnormal return and the likelihood of a SEC enforcement action).

FINRA (Jan. 12, 2016), https://perma.cc/XVS5-7ND9 (explaining that after algorithms detect unusual trading patterns before major corporate announcements, investigators compile an "Identification List" of those who placed suspicious trades).

had average returns of 34.9 percent over 21.3 trading days (the length of time from the day following the first alleged tip to the event date).²⁵⁸ Because M&A transactions take time to negotiate, tips in those cases occur on average a month before the public announcement.²⁵⁹ The average return over that period was 43.1 percent.²⁶⁰ Although these cases often had substantial pre-announcement run-ups, the mean (median) announcement day returns were still substantial, 21.9 percent (11.0 percent).²⁶¹

It is important to emphasize that these data come from filed cases. There may well be insider trading prior to transactions that result in smaller market reactions. These cases may never come to the attention of enforcement authorities. Even if they do, enforcers may choose not to file actions because of concerns about their ability to prove materiality. For present purposes, it is enough to note that the screening processes enforcers use tend to ensure that they will not typically bring cases involving information of questionable materiality.²⁶² In fact, these

262.Typically does not mean never. There are cases in the dataset in which enforcers took aggressive materiality positions. A good example is the enforcement action against Canadian investment banker Richard Moore. See Complaint ¶ 10, SEC v. Moore, No. 13-cv-02514 (S.D.N.Y. Apr. 16, 2013), ECF No. 1 (alleging insider trading against investment banker). One of Moore's primary clients was the Canadian Pension Plan Investment Board (the "CPPIB). Id. ¶ 1. Moore had worked with his friend, a Managing Director of CPPIB, on a number of transactions, and learned from him that CPPIB was working on a potential acquisition. Id. The Managing Director provided Moore with no material information about the acquisition target, but Moore learned that he had been traveling to London in connection with the potential deal. Id. ¶ 19. At a charity event, Moore spotted the Managing Director with the CEO of London-based Tompkins plc and surmised that it was the target. Id. ¶ 20. Moore purchased Tompkins ADRs and made a profit of \$163,293. SEC Charges Former Investment Banker with Insider Trading, Litigation Release No. 22674, 2013 SEC LEXIS 1120 (Apr. 16, 2013). Moore settled the action a week later. Final Judgment as to Richard Bruce Moore at 2, SEC v. Moore, No. 13-cv-02514 (S.D.N.Y. Apr. 16, 2013), ECF No. 3. Although Moore obtained some confidential information, it is hard to see how it was material. Indeed,

^{258.} Ahern, *supra* note 257, at 31–32.

^{259.} Id. at 28.

^{260.} Id. at 32.

^{261.} See *id.* at tbl.1 (displaying the mean and median announcement day returns for M&A corporate events).

processes may create under- not over-enforcement. If information is material but there is, for whatever reason, a more muted market response when public disclosure occurs, then significant insider trading may go undetected or unpunished. Such a situation could arise, for example, when significant tipping occurs after the initial trades, leading to a substantial price run-up prior to announcement.²⁶³

B. Financial Information Cases

Cases based on financial information were prominent parts of the recent crackdown involving hedge funds and expert networks.²⁶⁴ Indeed, as shown in Table 1 there is a significantly higher proportion of financial information cases involving criminal (29.2 percent) as opposed to exclusively civil enforcement (15.7 percent). Not surprisingly, these cases derive more frequently from FBI investigations (56.3 percent) rather than from FINRA surveillance (25.0 percent).

The majority of these cases involve short-term developments from which a trader could derive a definitive prediction about the direction and size of the company's stock price.²⁶⁵ As James Park has noted, trading on this kind of information undermines the integrity of the mandatory disclosure system.²⁶⁶ Often the information in these cases involves quarterly financial results or other information with a

this appears to be the classic situation in which a "skilled analyst with knowledge of the company and the industry may piece seemingly inconsequential data together with public information into a mosaic which reveals material non-public information." Elkind v. Liggett & Myers, Inc., 635 F.2d 156, 165 (2d Cir. 1980). While this seems quite clearly to be an aggressive interpretation, this kind of case is the exception rather than the rule.

^{263.} See Ahern, supra note 257, at 44 (stating that insider trading profits decrease as the length of the tipping chain increases).

^{264.} See infra Table 1; see also Benjamin Bain, Hedge Fund Woes After U.S. Crackdown Don't Surprise SEC's Chair, BLOOMBERG (Oct. 18, 2016) https://perma.cc/47KS-T4KJ (describing the large number of recent convictions as a "golden era for insider trading").

^{265.} See Park, supra note 237, at 1164–65 (stating that release of financial records has short-term implications for a company's value).

^{266.} Id. at 1136.

high probability of affecting the company's stock price.²⁶⁷ Consider, for example, the case against Steven Dombrowski, who worked in a corporate audit department.²⁶⁸ He learned that his company's first quarter results were worse than expected and that the company would miss its earnings target.²⁶⁹ In violation of the company's insider trading policy, Dombrowski sold his stock short and bought put options through his wife's brokerage account.²⁷⁰ He profited substantially when the stock dropped 35.7 percent on the news.²⁷¹

There is little doubt about the materiality of this kind of information, especially in situations like this one where results were out of line with market expectations.²⁷² These trades or tips generally occurred over a short timeframe—just 11.3 days in Ahern's study.²⁷³ Because this information is subject to mandatory reporting obligations and disclosed quarterly, there is little policy justification for permitting tipping and trading on it because those activities do almost nothing to improve allocative efficiency. As Judge Easterbrook and Professor Fischel have noted, quarterly earnings provide great opportunities for profitable trading, but trading "on news that is bound to come out anyway does not change the future or lead to better investment in new securities."²⁷⁴ The stock price will ultimately change when the company files.²⁷⁵ "That it changes a day or so quicker is not of much moment for allocative

^{267.} Id. at 1139.

^{268.} Complaint ¶ 1, SEC v. Dombrowski, No. 14-cv-00622 (N.D. Ill. Jan. 28, 2014), ECF No. 1.

 $^{269. \}quad Id.$

^{270.} Id.

^{271.} *Id.* $\P\P$ 39–42.

^{272.} See Bradford Cornell & Wayne R. Landsman, Security Price Response to Quarterly Earnings Announcements and Analysts' Forecast Revisions, 64 ACCT. REV. 680, 680 (1989) ("To the extent that earnings announcements are unanticipated, they are likely to provide new information about future cash flow and, thus, to alter the value of the firm.").

^{273.} Ahern, *supra* note 257, at 32 tbl.1.

^{274.} FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW 288 (1996).

 $^{275. \}quad Id.$

efficiency."²⁷⁶ Bringing cases based on this kind of MNPI is well within existing legal doctrines.

The salience of the information in these cases also derives from the industries in which trading is concentrated. Two industries—High Technology and, to a lesser degree Retail—dominate financial information cases. As shown in Table 3, 63.3 percent of the defendants traded in the securities of High Technology issuers. Another 8.2 percent traded in Retail securities. The stock prices of companies in these industries tend to be particularly sensitive to earnings and other financial news, further suggesting that those trading on the information were aware of its materiality.²⁷⁷

Table 3Financial Information Cases by Industry			
	Frequency Percent Cumulative		
			Percent
IT & High Technology	62	63.27	63.27
Retail	8	8.16	71.43
Oil & Gas	5	5.10	76.53
Apparel & Textiles	5	5.10	81.63
Biotechnology	4	4.08	85.71
Other	14	14.29	100.00
Total	98		

Note: Cases against individual defendants traded on the basis of MNPI concerning financial results. Multiple defendants traded in the same stocks, so percentages do not reflect industry frequency.

Still, in Ahern's study, earnings announcements had the smallest average returns—13.5 percent.²⁷⁸ They also had the smallest pre-announcement run-up (9.2 percent) and the

^{276.} Id.

^{277.} The sensitivity of companies in these industries to unexpected financial results is why allegations involving misrepresentations of earnings or similar data figure so prominently in securities class actions as well. See generally Michael A. Perino, Institutional Activism through Litigation: An Empirical Analysis of Public Pension Fund Participation in Securities Class Actions, 9 J. EMPIRICAL LEGAL STUD. 368 (2012).

^{278.} Ahern, *supra* note 257, at 32 tbl.1.

smallest announcement day returns (7.0 percent).²⁷⁹ While these data might suggest that enforcers employ a more capacious definition of materiality for financial information, there is another possibility.

In my dataset, which overlaps in time with the one Ahern employs, nearly 30 percent of the defendants trading on financial information (28.6 percent) were SMPs. These defendants can be expected to trade larger amounts leading to larger potential pre-announcement price increases. Indeed, the average total profits alleged in the sample are about 3.5 times larger for the financial information cases as for the M&A cases. Insider trading cases involving SMPs also have significantly higher trading profits than cases with other defendants.²⁸⁰ The lower event day returns may thus be the product of greater run-up rather than from the greater frequency of cases in which enforcers base their claims on marginally material information.²⁸¹

C. Product Approval Cases

As with M&A cases, there is usually little doubt about materiality in the 5 percent of cases involving product approvals. The twenty-three cases in the sample involved ten separate companies, all of which were either biotechnology or medical equipment manufacturers.²⁸² These were usually small companies, often with a single product in the FDA approval process.²⁸³ A typical example involved trading in GTx, Inc., a

 $^{279. \}quad Id.$

^{280.} The average total profit (both the direct profit to the defendant and the profit earned by downstream tippees) for cases with SMPs was \$9.7 million (in real 2016 dollars) compared to \$3.3 million in cases without such defendants. These differences are significant at about 1 percent.

^{281.} See Ahern, supra note 257, at 43 (stating that insider trading has a significant effect on stock prices, moving them closer to their fundamental values).

^{282.} Companies were classified by industry using their SIC codes. Of the ten companies, six manufacture Pharmaceutical Preparations (2834), three make Biological Products (2836), and one produced Medical Equipment (3829).

^{283.} See, e.g., Complaint ¶ 3, SEC v. Chu, No. 14-cv-00995 (C.D. Cal. May 19, 2014), ECF No. 1; Complaint ¶ 3, SEC v. Lama, No. 14-cv-00996 (C.D. Cal. May 19, 2014), ECF No. 1.

biotechnology company with a prostate cancer drug in Phase II clinical trials.²⁸⁴ Two doctors were lead investigators.²⁸⁵ Within minutes of learning that the FDA suspended those trials due to safety concerns, they sold a significant number of shares.²⁸⁶ The next day, when the company publicly disclosed the hold, its stock price dropped 36 percent.²⁸⁷

In terms of market reaction, GTx is a typical product case. In Ahern's study, cases involving clinic trial and drug regulatory announcements had the largest average returns over the shortest time period.²⁸⁸ Unlike M&A transactions, which may develop over many months and which may therefore create longer periods for tipping and trading, clinical trial results are usually disclosed quickly. Thus, trading in this MNPI does little to benefit allocative efficiency. But, given the importance of these products for the companies involved, the stock market effects are even greater than for M&A transactions. Gains from positive news events averaged 101.2 percent, while losses avoided for negative ones averaged 38.6 percent.²⁸⁹ The average holding period was just 9.2 days.²⁹⁰

The product approval cases provide a good illustration of another flaw in a common critique of insider trading enforcement—that enforcers and courts use the fact of trading alone to demonstrate materiality, effectively combining two elements (purchase or sale and materiality) into a single element. This critique is simply inaccurate. Enforcers and courts do not focus on the fact of the trade in isolation, but on the trade within the broader factual context of the case. Among the circumstantial evidence that complaints and court decisions highlight are the speed with which the defendant acts on the

- 288. See Ahern, supra note 257, at 32.
- 289. See id.
- 290. See id.

^{284.} See SEC Charges Two Clinical Drug Trial Doctors with Insider Trading, Litigation Release No. 22996, 2014 SEC LEXIS 1700 (May 19, 2014) (detailing charges against two urologists for insider trading on a biopharmaceutical company).

^{285.} See id.

^{286.} See id.

^{287.} See id.

tipped information,²⁹¹ the size of the trade,²⁹² the type of security traded,²⁹³ and how the trade compared to the defendant's prior history of trading.²⁹⁴ The simple fact that an individual trades rarely stands in isolation as the only evidence of materiality.

D. The Limits of Insider Trading Enforcement

The overwhelming focus on suspicious trading prior to dramatic market events likely creates a problem of under- rather than over-enforcement. To see why, consider the old joke about the policeman who comes across a drunk looking for his lost set of keys under a streetlamp.²⁹⁵ The policeman joins the search and after a few fruitless minutes asks the drunk if he

294. See Boudreault, 2015 SEC LEXIS 2881, at 3 (stating that sale was largest single trade in four years).

295. See Abraham Kaplan, The Conduct of Inquiry 11, 17–18 (1964).

^{291.} See SEC Charges Two Clinical Drug Trial Doctors with Insider Trading, Litigation Release No. 22996, 2014 SEC LEXIS 1700 (May 19, 2014) (involving a defendant who placed sell orders within minutes of learning that FDA was placing clinical trials on hold); see also Complaint ¶ 2, SEC v. Itri, No. 14-cv-02525 (D.N.J. Apr. 21, 2014), ECF No. 1 (alleging a tippee sold stock minutes after learning about negative clinical trial results); SEC v. Michel, 521 F. Supp. 2d 795, 828 (N.D. Ill. 2007) (stating that tippee bought stock the morning after discussing company negotiations on a flight); United States v. Rajaratnam, 802 F. Supp. 2d 491, 504 (S.D.N.Y. 2011) (describing tippee's instructions to wait to purchase stock until tipper provided guidance).

^{292.} See Boudreault, Exchange Act Release No. 75420, 2015 SEC LEXIS 2881 (July 10, 2015) (finding that defendant sold 100 percent of stock held in personal brokerage account and 40 percent of stock in IRA account after learning that FDA was placing hold on clinical trial); Complaint ¶¶ 4–5, SEC v. Fan, No. 11-cv-00096 (W.D. Wash. Jan. 19, 2011), ECF No. 1 (alleging that on several days, tippee's trades accounted for the majority of volume in entire market); see also United States v. Smith, 155 F.3d 1051, 1069 (9th Cir. 1998) (stating that evidence of a large trade could demonstrate use of material nonpublic information); United States v. Larrabee, 240 F.3d 18, 23 (1st Cir. 2001) (describing tippee's purchase following tip as "nearly twice as large" as any prior trades).

^{293.} See SEC Charges Former Pharmaceutical Company Executive and Friend with Insider Trading, Litigation Release No. 23125, 2014 SEC LEXIS 4095 (June 30, 2017) (detailing scheme where tippee invested in spread bets, which allowed him to profit from changes in the underlying value of the company's stock and options); Complaint ¶ 9, SEC v. Cohen, No. 10-cv-02514 (S.D. Cal. Dec. 8, 2010) (alleging that tippee purchased short-term, out-of-the money put options); Complaint ¶ 5, SEC v. Fan, No. 11-cv-00096 (W.D. Wash. Jan. 19, 2011), ECF No. 1 (same).

is sure that was where he lost his keys. "Oh no," the drunk replies, "I lost them in the park, but the light is better here."²⁹⁶ For enforcers, the streetlamp shines most brightly in M&A transactions and in the other contexts discussed above. Available evidence suggests that both the SEC and the SROs focus their monitoring on these situations, not necessarily because that is where most insider trading occurs but because that is where it is easiest to find and prosecute.²⁹⁷ This observational bias is not unique to enforcers. Academic studies also tend to focus on the same limited contexts.²⁹⁸

To understand these limitations, it is necessary to focus somewhat more closely on the extent to which the SEC relies on FINRA to identify potential insider trading cases. Most criminal insider trading cases come from referrals from the SEC or from the work of the FBI.²⁹⁹ The majority of civil cases do not appear to originate from the SEC's own investigative efforts.³⁰⁰ SROs perform the primary surveillance function, with the SEC supplementing those efforts with its own resources and those of criminal enforcement authorities.³⁰¹

SEC litigation releases typically credit either the sources of a filed civil case or agencies (such as the FBI) who provided assistance in the investigation.³⁰² As previously shown in Table 1 more than half of the SEC's cases (59.0 percent) come from FINRA referrals. This figure likely undercounts the number of cases originating with FINRA. The evidence suggests the SEC was more consistent in referencing referrals in the later parts of the study period, meaning the data likely undercount earlier

^{296.} Id.

^{297.} See supra notes 252-253 and accompanying text.

^{298.} See Anup Agrawal & Tareque Nasser, Insider Trading in Takeover Targets, 18 J. CORP. FIN. 598, 598 (2012) ("[T]akeovers are one of the most researched topics in finance.").

^{299.} See Mary Jo White, supra note 246 (discussing how various insider trading cases originated).

^{300.} See Testimony Concerning Insider Trading, supra note 155, at 2 (describing the Enforcement Division's daily collaboration with counterparts across self-regulatory organizations).

^{301.} See id. at 3 (describing the SRO's surveillance systems).

^{302.} See, e.g., SEC Charges Two Clinical Drug Trial Doctors with Insider Trading, Litigation Release No. 22996, 2014 SEC LEXIS 1700 (May 19, 2014) (discussing the FDA's role in assisting the investigation).

referrals. The Options Regulatory Surveillance Authority (ORSA), another SRO now operating under FINRA's supervision, appears in 25.0 percent of litigation releases. By contrast, the SEC's Market Abuse Unit is cited for its investigative efforts in only 15.3 percent of filed cases, often in conjunction with the work of the SROs.³⁰³

It is important to consider the potential benefits and costs of this system. SROs are valuable to the SEC because they allow the agency to partially outsource its investigations and presumably leverage the resources it deploys for detecting violations.³⁰⁴ Beyond such institutional benefits, SROs provide individualized benefits for risk-averse enforcement attorneys. For these attorneys, the more uncertainty associated with case outcomes, the greater pressure there is to pursue safer choices. Receiving a pre-packaged case from FINRA pinpointing a highly unusual, albeit small, trading pattern will be hard for many enforcement attorneys to ignore. All things being equal, these matters will tend to be viewed as low-risk options. Even if the investigation does not lead to a successful action, it will be easier for the enforcement attorney to blame a faulty SRO referral when her actions are reviewed.

But those benefits come with a significant cost. In connection with efforts that began in 2007, the SEC enforcement staff developed the Automated Bluesheet Analysis Project ("ABAP").³⁰⁵ Bluesheets provide detailed, trade-level data about trading in the subject security, including account information. They are typically the starting point for insider

^{303.} There are two reasons for the lower percentage of Market Abuse Unit cases. First, it is in part attributable to a reorganization of the Enforcement Division, which occurred during the study period. The Market Abuse Unit did not exist until the reorganization was announced in January 2010. Second, the Market Abuse Unit was formed to investigate complex, serial, and often hard-to-detect insider trading. It does not generally pursue traditional "one-off" cases.

^{304.} See Testimony Concerning Insider Trading, supra note 155 ("The surveillance departments at the SROs . . . use cutting-edge software programs to isolate unusual trading activity that may indicate insider trading.").

^{305.} See Khuzami, supra note 53 (explaining that the project helps enforcement staff "recognize suspicious trading patterns and identify relationships and connections among multiple traders and across multiple securities").

trading investigations.³⁰⁶ In developing the ABAP, the SEC's enforcement staff informally assessed the range of bluesheet coverage indicated by the number, scope, and timing of bluesheet requests made for trading in front of M&A announcements.³⁰⁷ By comparing those requests to the number of high value M&A transactions in a particular year, the staff observed that while regulators were historically effective in identifying and investigating suspicious trading based on the technological resources available to them, they could improve their bluesheet coverage and thereby expand their investigative reach by being more strategic in their focus on which transactions to bluesheet, among other things.³⁰⁸ In developing ABAP, the enforcement staff focused on traders whose trading patterns in the same stocks at the same time suggested that they potentially knew each other, had a common source of information, had shared MNPI, and had engaged in coordinated insider trading.³⁰⁹ Indeed, the enforcement staff's assessment in developing the ABAP was that while existing surveillance techniques were adequate to identify opportunistic insider trading on a "one-off" basis, they often did not capture coordinated or serial trading among more sophisticated market participants.³¹⁰

These results led the SEC enforcement staff to rethink its investigative approach and to deploy ABAP to identify potential relationships among traders and potential common sources of material nonpublic information. Developing what it calls a "trader-based" rather than "security-based" approach, the SEC looks for traders who collectively exhibit unusual trading patterns across different securities, and then tries to find common sources of information or relationship that link them

^{306.} When the SEC begins an investigation on its own initiative of as a result of a referral, it the sends out so-called bluesheet requests to broker-dealers and clearinghouses. FINRA also uses bluesheets in its preliminary investigations. *See Electronic Blue Sheets (EBS)*, FINRA, https://perma.cc/NKZ6-8XW6 (PDF) (describing Electronic Blue Sheets and their role in regulatory enforcement).

^{307.} Hawke Interview, *supra* note 53.

^{308.} Id.

^{309.} Id.

^{310.} Id.

together.³¹¹ But even under this approach, the SEC must still prove materiality and it therefore is still likely to focus on cases involving significant stock price movements. Materiality concerns continue to play a dominant role even in cases investigated under the trader-based approach. For example, in a case against a former law firm managing clerk, many of the transactions alleged in the complaint had announcement returns of over 30 percent.³¹² The trader-based approach simply allowed the SEC to identify insider trading in additional deals with no or only small abnormal returns.³¹³ And, of course, the case still focused on trading preceding M&A transactions.³¹⁴

To be sure, the intense focus on M&A transactions appears to have created some beneficial deterrent effects.³¹⁵ Studying stock price run-ups before deal announcements, Del Guercio and her co-authors find a smaller price impact in the early 2000s than was found in studies of insider trading in the 1980s, a

^{311.} The more frequently two traders appear to trade in front of the same stocks, the more likely it is that they know each other. See Todd Ehret, SEC's Advanced Data Analytics Helps Detect Even the Smallest Illicit Market Activity, REUTERS (June 30, 2017, 1:11 PM) https://perma.cc/PB99-QXQD (PDF) ("In contrast to the 'security-based' approach, the 'trader-based' approach examines or mines 'blue sheet' data to detect and analyze individual and institutional traders to determine which securities they trade.").

^{312.} See Complaint ¶ 55, SEC v. Eydelman, No. 14-cv-01742 (D.N.J. Mar. 19, 2014), ECF No. 1 (describing the ill-gotten gains as resulting in \$5.6 million in profits).

^{313.} See Stockbroker in Post-It Note Insider Trading Case Sentenced to 36 Months in Prison, Litigation Release No. 23667, 2016 SEC LEXIS 3721 (Sept. 30, 2016) (detailing elaborate and covert information-passing scheme from tipper to tippee).

^{314.} See *id.* (noting that the schemes involved "more than a dozen pending corporate transactions").

^{315.} Moves toward greater private ordering likely have also played a role. Black-out periods, pre-clearance for high level executives, or other policies are common at publicly traded companies. See J.C. Bettis et al., Corporate Policies Restricting Trading by Insiders, 57 J. FIN. ECON. 191, 192 (2000). These private ordering mechanisms appear to deter at least some kinds of improper trading. See Inmoo Lee et al., Do Voluntary Corporate Restrictions on Insider Trading Eliminate Informed Insider Trading?, 29 J. CORP. FIN. 158, 177 (2014).

result they attribute to greater fear of legal liability.³¹⁶ Lisa Meulbroek's study of that earlier period found an average abnormal return of 3.1 percent on days with insider trading.³¹⁷ By contrast, Del Guercio found average abnormal run-ups in their sample of cases filed between 2003 and 2011 of only 0.5 percent, an 80 percent decrease.³¹⁸ To address self-selection problems, the authors also looked at the impact of SEC enforcement intensity on the size of pre-announcement run-ups.³¹⁹ In the 1980s, 40 percent of the abnormal return occurred in the twenty days before the announcement compared to just 10 percent in the latter years of the Del Guercio study.³²⁰

There is little doubt that enforcement deters insider trading. The problem is that greater scrutiny only leads to greater deterrence if market participants perceive that enforcement activities increase the likelihood of detection.³²¹ This is why law enforcement strategies that crack down on particular crimes have been shown to be effective,³²² although often those reductions are temporary.³²³ But an enforcement program dominated by small traders engaged in obvious violations may very well create the opposite perception. Sophisticated insider traders, like street criminals who displace their activities from more heavily patrolled to less heavily

322. See, e.g., Aaron Chalfin & Justin McCrary, Criminal Deterrence: A Review of the Literature, 55 J. ECON. LIT. 5, 18–19 (2017) (detailing a policing strategy aimed specifically at youth violence in Boston and its expansion to other cities around the United States).

323. See Paternoster, supra note 321, at 793–94 (collecting studies).

^{316.} Diane Del Guercio et al., *The Deterrent Effect of SEC Enforcement Intensity on Illegal Insider Trading: Evidence from Run-up Before News Events*, 60 J. L. & ECON. 269, 271 (2017).

^{317.} Meulbroek, *supra* note 234, at 1676 tbl.v.

^{318.} Del Guercio et al., *supra* note 316, at 271.

^{319.} *Id.* at 272.

^{320.} Id.

^{321.} See Raymond Paternoster, How Much Do We Really Know About Criminal Deterrence?, 100 J. CRIM. L. & CRIMINOLOGY 765, 784–86 (2010); Chris William Sanchirico, Detection Avoidance, 81 N.Y.U. L. REV. 1331, 1346 (2006) (describing the components of deterrence to include perception by market participants).

patrolled neighborhoods, may simply shift their illicit trading strategies in ways designed to avoid detection.³²⁴

As Kate Andrias has noted, sophisticated parties tend to be "aware of informal, undisclosed policies of nonenforcement or prioritization."³²⁵ And it seems equally likely that they have a reasonably subtle appreciation for how targeted crimes are detected. Because detection techniques rely so heavily on the temporal proximity between the trade and a dramatic market event there are several ways that sophisticated traders could adopt strategies to obscure their violations. Indeed, there is empirical evidence suggesting that traders continue to earn abnormal market returns through trading strategies evidently designed to avoid, if not detection, at least enforcement.³²⁶ For example, some company insiders are apparently able to avoid losses associated with previously uninterrupted strings of earnings increases by selling their shares before those breaks.³²⁷ Rather than concentrating their sales immediately before the breaks, insiders shift their trading to earlier time periods,³²⁸ which not only makes detection more difficult but creates additional legal hurdles for enforcers, who must show that the trading was on the basis of MNPI. This strategy appears to exploit the rules of thumb enforcers use. It is often the case that the closer in time trades are made before a public announcement, the more likely an SEC investigation will result.³²⁹

In M&A transactions, the SEC tends to focus on trading in the common stock of the target company. Common stock trading

^{324.} See John J. Donohue et al., *Do Police Reduce Crime? A Reexamination* of a Natural Experiment, in EMPIRICAL LEGAL ANALYSIS: ASSESSING THE PERFORMANCE OF LEGAL INSTITUTIONS 125, 125 (Yun-Chien Chang ed., 2013) (finding that criminals move their activities when policing increases in their local areas).

^{325.} Andrias, *supra* note 38, at 1098.

^{326.} See Bin Ke et al., What Insiders Know about Future Earnings and How They Use It: Evidence from Insider Trades, 35 J. ACCT. & ECON. 315, 316 (2003) (noting traders' awareness of trading patterns and strategies to lower detection).

^{327.} See *id.* at 330 (explaining that insiders must sell before the break to "avoid the stock price drop which coincides with the break").

^{328.} See id. at 343.

^{329.} Hawke Interview, *supra* note 53.

accounts for 55.3 percent of M&A cases in the dataset. Pure derivative trading is just 11.8 percent. Given the incentive structure of enforcement attorneys, this emphasis makes sense. As shown in more detail below, cases involving common share trading prior to M&A announcements, particularly those referred by FINRA, settle more quickly than other kinds of cases.³³⁰ These cases represent easy opportunities for enforcement attorneys and the agency to increase their win rates.

But only the least sophisticated traders are likely to engage in such trading. Savvier, more experienced traders may devise profitable trading strategies that are subtler. For example, a recent study shows traders shifting to two types of derivative transactions: (1) out-of-the-money call options of target companies; and (2) at-the-money straddles of the acquiring companies, which have positive returns if the acquirer's stock price moves in either direction. Trading volumes tend to be higher in larger deals with greater liquidity, conditions that make it easier to disguise informed trading.³³¹ These patterns are consistent with sophisticated traders exploiting MNPI in ways that enforcers are less likely to detect or pursue.³³²

As a result, for all the resources devoted to detection, to the extent that enforcers continue to focus predominantly on common stock trading before dramatic market events, they remain much more likely to uncover the least sophisticated traders engaged in the most obvious insider trading.³³³ Indeed, as computer power and analytical sophistication grow, investigators both at the SEC and FINRA are now able to

^{330.} See infra Part VII.A.

^{331.} See Augustin, *supra* note 257, at 9; Alex Frino et al., *How Much Does an Illegal Insider Trade*?, 13 INT'L REV. FIN. 241, 252 (2013) (insiders decrease trade volumes in response to increases in the likelihood of detection).

^{332.} See Jon A. Garfinkel, New Evidence on the Effects of Federal Regulations on Insider Trading: The Insider Trading and Securities Fraud Enforcement Act (ITSFEA), 3 J. CORP. FIN. 89, 96–104 (1997) (noting that there is evidence that informed traders shift their trading patterns in response to changes in penalty severity, consistent with standard deterrence theory).

^{333.} See Jesse M. Fried, Reducing the Profitability of Corporate Insider Trading Through Pretrading Disclosure, 71 S. CAL. L. REV. 303, 333 (1998) (explaining that the SEC will focus its enforcement resources where violations are most likely to have occurred and will be the easiest to prove).

identify small, suspicious trading anomalies that might previously have gone undetected.³³⁴ The referrals the SEC receives from SROs (Table 4) generally involve these smaller matters. For example, the mean (median) alleged profits in cases referred by FINRA are \$2.39 million (\$176,686), significantly less than the mean and median profits in cases from other sources (\$7.94 million and \$791,760).

Table 4 Total Alleged Profits in Referred Insider Trading Cases

	eases	
	Mean	Median
FINRA		
FINRA Referral	\$2,385,832**	\$176,686
No FINRA Referral	\$7.937,938	\$791,760
ORSA		
ORSA Referral	\$1,709,060*	\$440,657
No ORSA Referral	\$6,175,192	\$279,031

Significance: * = 0.05 ** = 0.01 *** = 0.001

Source: SEC Litigation Releases and filed case documents. Total profits are in inflation adjusted 2016 dollars and represent the defendant's alleged profits and the profits of all other members in the same insider trading network.

To be sure, such trading remains unlawful, and it is hard to argue that enforcers should not pursue such cases, particularly where investigation is easy, cheap, and quick.

But it is not. SROs do not have subpoena powers.³³⁵ The SEC still has to investigate SRO referrals before filing a case. I analyzed the time between the first alleged insider trading event and the filing of an SEC action. The mean (median)

^{334.} See 3 ALAN R. BROMBERG ET AL., BROMBERG & LOWENFELS ON SECURITIES FRAUD § 6:110 (2d ed. 2020) (stating that technological developments have enabled "the SEC to sift through all the 'chatter' of available financial and personal information in order to detect insider trading").

^{335.} See 6 BROMBERG ET AL., supra note 334, § 12:192 ("[S]elf-regulatory organizations lack subpoena power").

number of days is 1180 (1215). In other words, it takes enforcers on average over three years to identify, investigate, and file the cases they bring. We cannot directly observe the intensity of investigative effort over this time period.³³⁶ But SEC officials have repeatedly emphasized how time-consuming and labor-intensive insider trading investigations are.³³⁷ Whatever the potential mix of cases it might choose to investigate, the agency is devoting considerable effort to a large number of small, simple cases. Given all of the ways that the SEC could deploy its enforcement resources, it is a legitimate question whether pursuing these cases as extensively as it does is likely to be a rational and effective deterrence strategy.³³⁸ That question is all the more salient given that the SEC's enforcement choices are almost entirely insulated from judicial review.339

Indeed, the incentives to pursue small, easily resolved cases may be increasing. In a series of recent cases, the Supreme Court has applied a five-year statute of limitations on SEC enforcement actions seeking either civil penalties or disgorgement, the primary recoveries in insider trading cases.³⁴⁰ While these decisions would preclude only a minority of SEC cases and limit the SEC's ability to obtain disgorgement in others, they may create additional incentives for the agency to eschew long, complicated investigations of complex schemes in

339. See Heckler v. Chaney, 470 U.S. 821, 831 (1985) (stating that agencies are endowed with considerable discretion "attributable in no small part to the general unsuitability for judicial review of decisions to refuse enforcement").

340. See Gabelli v. SEC, 568 U.S. 442, 442 (2013) (explaining that if the SEC seeks civil penalties, it must file suit within five years of the date when the claim accrued, pursuant to a general statute of limitations); Kokesh v. SEC, 137 S. Ct. 1635, 1638 (2017) (stating that a five-year statute of limitations applies when the SEC seeks civil penalties).

^{336.} See 17 C.F.R. § 203.5 (2020) ("[A]]l formal investigative proceedings shall be non-public.").

^{337.} See Testimony Concerning Insider Trading, supra note 155 (describing how time intensive, "complex[,] and painstaking" insider trading cases can be).

^{338.} See David Freeman Enstrom, Agencies as Litigation Gatekeepers, 123 YALE L.J. 616, 684 (2013) (noting that scholars have "long contended that the SEC tends to pursue relatively small cases in an effort to pad its success rate... rather than allocating scarce enforcement resources with an eye to optimizing deterrence").

favor of obvious cases that can be investigated and filed more quickly.³⁴¹

Focusing enforcement efforts on small, unsophisticated insider trading may do little to deter the more sophisticated traders who are at the heart of so much enforcement rhetoric. Indeed, the substantial disconnect between what enforcement officials say and what they actually do in practice raises important questions about the perceived legitimacy of insider trading enforcement. When enforcers' public talk deviates from actual practices, they run the risk of muting or distorting the message prosecutions are supposed to send. We can call this problem "enforcement dissonance"—what enforcers claim they are doing does not match what they are actually doing. At some point, straying too far from the rhetorical underpinnings of enforcement might call into question the very necessity for any enforcement of insider trading proscriptions, precisely the reaction we see in both academic and popular critiques.

VI. The Misappropriation Theory and Duties of Trust and Confidence

Few insider trading critics dispute that trading in breach of a traditional fiduciary duty (such as those applicable to employees or other agents) should give rise to liability, regardless of whether that action is premised on the classical or misappropriation theory. Similarly, the circumstances under which temporary constructive insiders (lawyers, investment bankers, accountants, and other consultants) inherit the abstain or disclose duty are well settled.³⁴² More controversy surrounds other duties of "trust and confidence" that might give

^{341.} See Urska Velikonja, Public Enforcement After Kokesh: Evidence from SEC Actions, 108 GEO. L.J. 389, 431 (2019) ("The SEC's limited resources mean that it cannot be everywhere at all times, so Kokesh might push the Agency to look for misconduct under the street light.").

^{342.} See, e.g., ANDERSON, supra note 18, at 76 (stating that the basis for recognizing temporary insider status is "that they have entered into a special confidential relationship in the conduct of the business of the enterprise and are given access to information solely for corporate purposes" (quoting Dirks v. SEC, 463 U.S. 646, 655 n.14 (1983))).

rise to liability under the misappropriation theory.³⁴³ Naturally the question arises—how expansive are these duties and can market participants predict with certainty the relationships that create liability?

Critics charge that enforcers take too broad a view of such duties and that they expand them to fit the needs of the actions they want to file.³⁴⁴ The result is a vague and uncertain liability standard.345 These non-traditional duties of trust and confidence involved everything have from familial relationships,³⁴⁶ friendships.³⁴⁷ and confidentiality agreements³⁴⁸ to membership in organizations like Alcoholics Anonymous, with either explicit or implicit expectations of confidentiality.349

348. See SEC v. Kornman, 391 F. Supp. 2d 477, 489, 491 (N.D. Tex. 2005) (concluding that MPNI learned by a tax and financial planning consultant was confidential even though the parties had not yet entered into a contract for those services).

^{343.} See *id.* ("The courts and the SEC have not... been so clear and consistent in identifying who assumes a fiduciary or similar relation of trust and confidence under the misappropriation theory.").

^{344.} ANDERSON, *supra* note 18, at 62.

^{345.} See Painter, supra note 120, at 157 ("[I]t is clear that the misappropriation theory remains exceptionally vague as a standard for criminal liability.").

^{346.} See SEC v. Yun, 327 F.3d 1263, 1271–73 (11th Cir. 2003) (spouses); United States v. Reed, 601 F. Supp. 685, 690 (S.D.N.Y. 1985) (parent and child), rev'd on other grounds, 773 F.2d 477 (2d Cir. 1985).

^{347.} See United States v. McPhail, 831 F.3d 1, 5–7 (1st Cir. 2016) (friends). Most friend cases involve situations in which one friend impermissibly tips another. These cases are analyzed under the *Dirks* standard and, like other tipping cases, the key question is whether the tipper received a personal benefit. See infra Part VII.D. By contrast, misappropriation cases often involve one friend secretly converting MNPI for his or her personal benefit. In such cases, the relevant question is whether the friendship creates a duty of trust or confidence sufficient for liability under the misappropriation theory. See *McPhail*, 831 F.3d at 5–7 (outlining the relationship between McPhail and Santamaria, from whom he obtained the classified information, and determining that there was an established level of trust and confidence between the two that was subsequently breached by McPhail).

^{349.} See United States v. McGee, 763 F.3d 304, 317 (3d Cir. 2014) (explaining that the expectation of confidentially engendered between two parties connected through Alcoholics Anonymous that resulted in one trading on MPNI learned in the confines of that relationship violated Rule 10b-5); SEC

Front and center in this critique is the SEC's adoption of Rule 10b5-2.350 Promulgated in the wake of United States v. $Chestman^{351}$ and other cases that tried to cabin the reach of the misappropriation theory,³⁵² the rule defines three non-exclusive situations that give rise to the requisite duty of trust and confidence: (1) whenever a person agrees to maintain information in confidence; (2) whenever there is a "history, pattern, or practice" of sharing confidential information that gives rise to an expectation of confidentiality; and (3) between close family members, specifically a "spouse, parent, child, or sibling."353 Commentators have guestioned the validity of at least some aspects of Rule 10b5-2, primarily asserting that the SEC does not have the authority to extend liability beyond traditional fiduciary duties or duties of trust and confidence that are "similar" to traditional fiduciary duties.³⁵⁴ Under this view, only relationships that involve both discretionary authority and dependency are sufficiently similar to warrant potential

v. Kirch, 263 F. Supp. 2d 1144, 1149 (S.D.N.Y. 2003) (confirming the existence of an express duty of confidentiality among members of CEO Roundtable). *But see* United States v. Kim, 184 F. Supp. 2d 1006, 1012–13 (N.D. Cal. 2002) (holding that trading on MPNI learned through membership in Young Presidents Organization did not give rise to misappropriation liability).

^{350. 17} C.F.R. § 240.10b5-2 (2020).

^{351. 947} F.2d 551 (2d Cir. 1991).

^{352.} See *id.* at 567 (stating that the court will "tread cautiously in extending the misappropriation theory to new relationships, lest our efforts to construe Rule 10b-5 lose method and predictability"); Selective Disclosure and Insider Trading, 64 Fed. Reg. 72,590, 72,602 (proposed Dec. 28, 1999) (citing *Chestman*).

^{353. 17} C.F.R. § 240.10b5-2(b) (2020).

^{354.} See BAINBRIDGE, supra note 231, at 104 (stating that there is "some doubt as to the validity of the Rule" and that that courts should be "loath" to employ this phraseology as an expansion method).

liability.³⁵⁵ For the most part, courts have found Rule 10b5-2 to be a proper exercise of delegated authority.³⁵⁶

Whatever the merits of those arguments, what have securities enforcers actually done in practice? Are there large numbers of cases premised on overly broad interpretations of duties of trust and confidence? Are there significant differences between civil and criminal cases?

The data presented here only partially support existing critiques. As Table 5 shows, there were 121 defendants in the sample who were alleged to have misappropriated MNPI in breach of a fiduciary or other duty of trust and confidence owed to the source of the information. For the most part these cases were unexceptionable. Nearly half of the defendants were alleged to have traded on or disclosed MNPI they learned through an employment relationship (47.9 percent). There is no dispute that misappropriation liability is appropriate in these situations because employees are agents who owe a fiduciary duty to the principal and have an obligation not to use the principal's information for their benefit.³⁵⁷ Another 18.2 percent of cases are premised on a traditional fiduciary relationship

^{355.} Chestman, 947 F.2d at 569 ("We have little trouble finding the evidence insufficient to establish a fiduciary relationship or its functional equivalent between Keith Loeb and the Waldbaum family."). But see Kornman, 391 F. Supp. 2d at 488 (finding the basis for liability on the alleged "disparate knowledge and expertise" of Kornman, placing no emphasis on discretionary authority or dependence).

^{356.} See *McGee*, 763 F.3d at 310–16 (finding Rule 10b5-2 proper in both the SEC's rulemaking authority and in supporting convictions for securities fraud and perjury).

^{357.} See BAINBRIDGE, supra note 231, at 105; RESTATEMENT (THIRD) OF AGENCY § 8.05 (AM. L. INST. 2006) ("[I]t is a breach of an agent's duty to use confidential information of the principal for the purpose of effecting trades in securities \ldots .").

involving professionals such as lawyers,³⁵⁸ accountants,³⁵⁹ or investment bankers.³⁶⁰ Roughly two-thirds of misappropriation actions, therefore, are premised on uncontroversial fiduciary relationships.

m 11

Table 5				
Alleged Duties in Misappropriation Cases				
Nature of Duty	Civil Only	Criminal	Total	
Employment	32 (42.67)	26(56.52)	58 (47.93)	
Other Traditional	12 (16.00)	10 (21.74)	22 (18.18)	
Fiduciary				
Family Relationship	13 (17.33)	2(04.35)	15 (12.40)	
Friendship	7 (09.33)	3 (06.52)	10 (08.26)	
Confidentiality Agreement	8 (10.67)	4 (08.70)	12 (09.92)	
Other	2 (02.67)	1 (02.17)	3 (02.48)	
Unknown	1 (01.33)	0 (00.00)	1 (00.83)	
Total	75	46	121	

Note: Number (percent) of fiduciary or other duty of trust and confidence defendant violated in misappropriation cases as alleged in the complaint or other charging document.

Cases based on family relationships, friendships, or breaches of confidentiality agreements are less frequent. Of these, family relationships are the most prevalent (involving 17.3 percent of civil defendants) and the least problematic. To be sure, some early cases argued that not all close family relationships necessarily gave rise to a duty of trust and

^{358.} See, e.g., Complaint ¶ 4, SEC v. Grewal, No. 14-cv-02026 (C.D. Cal. Dec. 22, 2014), ECF No. 1 (stating that defendant was primary outside counsel that advised on matters of "corporate and securities law."); Complaint ¶ 1, SEC v. Cutillo, No. 09-cv-09208 (S.D.N.Y. Nov. 5, 2009), ECF No. 1 (alleging that defendant, an attorney, "misappropriated from his law firm material, nonpublic information concerning at least four corporate acquisitions or bids").

^{359.} See, e.g., Complaint ¶ 6, SEC v. London, No. 13-cv-02558 (C.D. Cal. Apr. 11, 2013), ECF No. 1 (involving a partner at a large accounting firm); Halpern, Exchange Act Release No. 71748, 2014 SEC LEXIS 1008 (Mar. 19, 2014) (issuing a cease-and-desist order describing defendant as "a personal tax accountant").

^{360.} See, e.g., Complaint $\P\P$ 1–2, SEC v. Hixon, No. 14-cv-00158 (W.D. Tex. Feb. 20, 2014), ECF No. 2 (stating that the defendant had spent "at least the last 12 years of his career as an investment banker").

confidence,³⁶¹ but Rule 10b5-2 replaced the case-by-case analysis those decisions called for with a bright-line rule. While critics might disagree with how the SEC has drawn that line, if the primary complaint about the misappropriation theory is that it creates uncertain liability because duties of trust and confidence are poorly specified, then defining the precise relationships that give rise to liability should adequately address these concerns.³⁶² The family cases enforcers bring tend to fit squarely within the confines of Rule 10b5-2.³⁶³

Misappropriation cases premised on friendship can be more problematic. The SEC often couples allegations of friendship with allegations of a confidentiality agreement or with some evidence of a history, pattern, and practice of sharing confidences to try to fit the cases within the confines of Rule 10b5-2. In some cases, these allegations are quite detailed,³⁶⁴ but all too frequently the evidence is rather thin and the

^{361.} See United States v. Chestman, 947 F.2d 551, 568 (2d Cir. 1991) ("[M]ore than the gratuitous reposal of a secret to another who happens to be a family member is required to establish a fiduciary or similar relationship of trust and confidence.").

^{362.} See Joan MacLeod Heminway, Martha Stewart and the Forbidden Fruit: A New Story of Eve, 2009 MICH. ST. L. REV. 1017, 1039 (2009) ("[C]ontinuing uncertainty regarding the identity of the beneficiary of the requisite duty of trust and confidence for insider trading liability under Section 10(b) and Rule 10b-5 further illustrates the unclear nature of that duty under existing doctrine.").

^{363.} See Complaint ¶ 11a, United States v. Kanodia, No. 15-cr-10131 (D. Mass. Apr. 1, 2015), ECF No. 3 (husband misappropriated MNPI from wife); Complaint ¶ 1, SEC v. Goetz, No. 11-cv-01220 (S.D. Cal. June 3, 2011), ECF No. 1 (father misappropriated MNPI from daughter); Complaint ¶ 1, SEC v. Ni, No. 11-cv-0708 (N.D. Cal. Feb. 16, 2011), ECF No. 1 (brother misappropriated MNPI from sister). But see Order Denying Defendant's Motion for Judgment as a Matter of Law at 2, SEC v. Jacobs, No. 13-cv-01289 (N.D. Ohio Aug. 5, 2014), ECF No. 112 (no liability following a conversation between brothers).

^{364.} See Complaint $\P\P$ 13–19, SEC v. Schvacho, No. 12-mi-99999 (N.D. Ga. July 24, 2012), ECF No. 1509 (providing a detailed account of the relationship between the insider and the accused); Complaint $\P\P$ 56–63, SEC v. Scammell, No. 11-cv-06597(C.D. Cal. Aug. 11, 2011), ECF No. 1 (involving a similar detailed account of allegations against defendant).

allegations conclusory.³⁶⁵ For example, in *SEC v. Darden*,³⁶⁶ the defendant allegedly misappropriated MNPI from a director regarding a company's proposed merger.³⁶⁷ The SEC alleged that the two men "maintained regular contact over 30 years" and shared an office suite for six years.³⁶⁸ But the only allegation about an agreement was the conclusory statement that "they shared information, which information was expected to be and was maintained as confidential."³⁶⁹ In some cases, there is virtually no factual detail regarding the relationship. In *SEC v. Doyle*,³⁷⁰ the only allegations were that the insider was the defendant's house guest and inadvertently left deal documents there.³⁷¹ That is hardly the stuff of a duty of trust and confidence, but those issues were never litigated.³⁷² The case settled the day after it was filed, as did many of the friendship cases.

Cases based solely on confidentiality agreements have been similarly controversial. Early decisions often held that "a fiduciary duty cannot be imposed unilaterally by entrusting a person with confidential information."³⁷³ As noted, some commentators use these holdings to question the validity of Rule 10b5-2(b)(1), which defines breach of such an agreement to be

^{365.} See SEC v. Conradt, 947 F. Supp. 2d 406, 411–12 (S.D.N.Y. 2013) (recognizing shortcomings of SEC's allegations but finding them sufficient for purposes of a motion to dismiss).

^{366.} No. 13-cv-00138 (N.D. Ga.).

^{367.} Complaint ¶ 12, SEC v. Darden, No. 13-cv-00138 (N.D. Ga. Jan. 15, 2013), ECF No. 1.

^{368.} *Id.* ¶ 13.

^{369.} Id. ¶ 14; see Complaint ¶ 13, SEC v. Drewery, No. 14-cv-00299 (E.D.N.C. May 27, 2014), ECF No. 1 (alleging that the men were "best friends" and had known each other for thirty-five years); Complaint ¶ 18, SEC v. McEnery, No. 15-cv-04091 (N.D. Cal. Sept. 9, 2015), ECF No. 1 (involving a defendant and an insider that had "dated on and off since the early 1990s" and had a "history of sharing confidences").

^{370.} No. 11-cv-04964 (S.D.N.Y.).

^{371.} Complaint ¶¶ 10–11, SEC v. Doyle, No. 11-cv-04964 (S.D.N.Y. July 19, 2011), ECF No. 1.

^{372.} Agreed Final Judgment at 1, SEC v. Doyle, No. 11-cv-04964 (S.D.N.Y. July 21, 2011), ECF No. 4.

^{373.} Walton v. Morgan Stanley & Co., 623 F.2d 796, 799 (2d Cir. 1980) (applying Delaware law).

sufficient for misappropriation liability.³⁷⁴ But many of the cases enforcers actually bring involve clear-cut situations in which the defendants violated explicit confidentiality agreements. Often these cases involve doctors supervising clinical trials³⁷⁵ or other kinds of consulting arrangements.³⁷⁶ In other cases, defendants were provided confidential offering information only after they agreed not to trade on it or tip it to anyone else.³⁷⁷ None of these cases involve overly aggressive interpretations of duties of trust and confidence.

Taken together, there is some evidence the SEC expansively interprets duties of trust and confidence, particularly with respect to misappropriation among friends. While such cases constitute a small part of the civil enforcement actions, it would be particularly troubling if those same expansive and vague interpretations arose in the criminal context. Vague standards in criminal prosecutions could raise

^{374.} See Ryan M. Davis, Note, *Trimming the "Judicial Oak": Rule* 10b5-2(b)(1), *Confidentiality Agreements, and the Proper Scope of Insider Trading Liability*, 63 VAND. L. REV. 1469, 1487 (2010) (stating that *Chestman* remains the "most influential" case on the matter of duties required and that this reliance has engendered different responses to the validity of the Rule in courts).

^{375.} See Boudreault, Securities Act Release No. 9864, Exchange Act Release No. 75420, 2015 SEC LEXIS 2881 (July 10, 2015) (describing defendant as a consultant for medical clinical trials); Amended Complaint ¶ 2, SEC v. CR Intrinsic Invs., LLC, No. 12-cv-08466 (S.D.N.Y. Mar. 15, 2013), ECF No. 25 (stating that Defendant Gilman "served as the chairman of the Safety Monitoring Committee (the "SMC") overseeing the clinical trial"); Amended Complaint ¶ 2, SEC v. Benhamou, No. 10-cv-08266 (S.D.N.Y. Apr. 13, 2011), ECF No. 3 (stating that Dr. Benhamou "was one of five members of a Steering Committee overseeing the clinical trial").

^{376.} See Complaint ¶ 3, SEC v. Condon, No. 15-cv-07443 (C.D. Cal. Sept. 23, 2015), ECF No. 1 (consultant retained to provide executive coaching services).

^{377.} See Complaint ¶ 1, United States v. Fishoff, No. 15-mj-03622 (D.N.J. May 29, 2015), ECF No. 1 (stating that defendants "received inside information concerning a confidentially marketed secondary stock offering... pursuant to defendants' entry into confidentiality or "wall-crossing" agreements" prohibiting disclosure or trading in the company's securities).

significant due process concerns,³⁷⁸ and expansive applications of sparse statutory language would be inconsistent with the rule of lenity that normal applies to the interpretation of criminal statutes.³⁷⁹

There is a little evidence, however, that expansive civil interpretations of duties of trust and confidence present a particular problem in criminal cases. Courts have often shown some sensitivity to expanding duties of trust and confidence in criminal cases even if they are willing to do so in civil ones.³⁸⁰ The data suggest that criminal prosecutors consider these concerns. As Table 5 shows, criminal and civil enforcers bring similar proportions of misappropriation cases. Approximately a quarter of the defendants subject to criminal prosecution (24.9 percent) were alleged to have misappropriated MNPI, compared to 27.1 percent in exclusively civil actions. Nontraditional duties of trust and confidence, however, appear with far greater frequency in civil cases. About 41 percent of civil cases involve a nontraditional duty of trust and confidence compared to just 21.7 percent for criminal cases. These differences are significant at less than 5 percent.

When criminal enforcement authorities pursue cases involving nontraditional fiduciary duties, they typically involve relatively egregious cases of insider trading, often involving close family members. These are the kinds of cases that tend not to test the boundaries of insider trading doctrine. For example, Matthew Devlin stole MNPI from his wife, an executive at a communications firm that provided services to companies engaged in M&A transactions.³⁸¹ Devlin tipped the information to day traders, who referred to Devlin's wife as the "Golden Goose" in text messages because of the valuable information she

^{378.} See Chiarella v. United States, 445 U.S. 222, 235 n.20 (1980) ("[A] judicial holding that certain undefined activities 'generally are prohibited' by § 10(b) would raise questions whether either criminal or civil defendants would be given fair notice that they have engaged in illegal activity.").

^{379.} Whitman v. United States, 574 U.S. 1003, 1005 (2014) (Scalia, J.).

^{380.} See SEC v. Yun, 327 F.3d 1263, 1272 n.22 (11th Cir. 2003) (declining to narrowly circumscribe duties of trust and confidence in civil context).

^{381.} United States v. Corbin, 729 F. Supp. 2d 607, 609–10 (S.D.N.Y. 2010).

possessed.³⁸² But the court did not rest its finding of a duty of trust and confidence solely on the marriage relationship.³⁸³ Instead, it held that the indictment could not be dismissed because it alleged "repeated disclosure of business secrets" and an agreement to maintain the confidentiality of those secrets sufficient to demonstrate "the functional equivalent of a fiduciary relationship."³⁸⁴ Such allegations would be sufficient even under the most restrictive interpretations of the misappropriation theory.

Criminal cases based on friendship tend not to be based solely on the existence of the relationship itself. Rather, they typically involve strong evidence of an agreement to maintain information in confidence, thus fitting easily within the confines of Rule 10b5-2. For example, in *United States v. McPhail*,³⁸⁵ the defendant was close friends with an executive of a publicly traded company.³⁸⁶ The executive disclosed MNPI in confidence to McPhail, warning him that he should never repeat anything they discussed.³⁸⁷ Nonetheless, McPhail tipped the MNPI to other friends.³⁸⁸ Evidence in the case showed both that McPhail knew that he should maintain the confidentiality of the MNPI and that passing it on was wrongful.³⁸⁹

Taken together, these data suggest that civil enforcers define duties of trust and confidence more expansively than criminal enforcers. Criminal enforcement does sometimes involve nontraditional fiduciary duties, but usually in cases involving close family relationships or situations in which there is a clear agreement to maintain the confidentiality of

389. *Id.* at 6–7.

^{382.} See *id.* at 610 (stating that Devlin's wife was referred to as the "Golden Goose" because she was "able to produce precious information about publicly-traded companies prior to its public announcement").

^{383.} Id.

^{384.} *Id.* at 616–17 (quoting United States v. Chestman, 947 F.2d 551, 569 (2d Cir. 1991)).

^{385. 831} F.3d 1 (1st Cir. 2016).

^{386.} Id. at 3.

^{387.} *Id.* at 5.

^{388.} Id.

information.³⁹⁰ As a result, fears that expansive civil interpretations of duties of trust and confidence are inappropriately broadening the scope of criminal liability appear not be borne out by actual prosecutorial practices.

VII. The Targets of Insider Trading Enforcement

To more fully understand how enforcement rhetoric matches up with enforcement reality, this section provides detailed data on which cases enforcers bring against which defendants and how those cases are resolved. By looking at how enforcers operationalize insider trading law, we can better evaluate which of the competing depictions of enforcement is the most accurate. The available evidence strongly suggests that the SEC targets enforcement efforts at cases that are likely to be quickly and easily resolved. Criminal enforcement, by contrast, is generally reserved for more serious cases, measured by, among other things, the type of defendant, the size of the insider trading network, and the profits earned. But like civil cases, the criminal cases tend to be those in which liability is fairly certain.

A. Civil Outcomes

Perhaps the best evidence that the SEC focuses its enforcement efforts on cases that are likely to be quickly and easily resolved are the actual enforcement outcomes. As shown in Table 6, the sample contains 405 actions the SEC filed in federal court that were resolved when the sample was analyzed. The SEC won 93.1 percent of those cases. Win rates like these are not uncommon in governmental enforcement proceedings, and they are driven in large part by high settlement rates. More than 90 percent of the resolved cases in the dataset were settled. Twenty-three cases were resolved in defendants' favor through some form of pre-trial resolution. The SEC won only nine (64.3 percent) of the fourteen cases that went to trial.

^{390.} See *id.* at 5 ("[T]he evidence that he [McPhail] knew that Santamaria was expecting him to keep the inside information secret is quite strong.").

	Number	(% Total)
Government	377	(93.09)
Settlement	368	(90.86)
Civil Trial	9	(2.22)
Defendant	28	(6.91)
Dismissal	23	(5.68)
Civil Trial	5	(1.23)
Total	405	

Table 6
Outcomes in Resolved SEC Federal Court Actions

Note: Included all SEC civil actions in federal court that were resolved when the sample was analyzed.

More telling than the number of cases that settle, however, is the speed with which cases are resolved. The SEC's actions are typically stayed if there is a parallel criminal action, substantially lengthening the time to resolve the case.³⁹¹ As shown in Table 1, on average, the 158 civil cases with parallel criminal actions took 625 days to resolve, significantly longer than the 251 days to resolve the remaining 247 civil enforcement actions.³⁹² But most civil actions are resolved much more quickly. As shown in Table 7, a total of 121 cases (49.0 percent) settled within thirty days or fewer of filing. Although the SEC takes a long time to bring cases, once it does, they wrap up quickly.³⁹³ The shorter the case the better the outcome for the SEC. The agency obtained a settlement in 100 percent of the cases resolved in 180 days or fewer; it prevailed in just 81.6 percent of the cases that took longer to resolve.

^{391.} See Velikonja, supra note 341, at 423.

^{392.} See infra Table 1. This difference is significant at less than 0.001.

^{393.} See supra Part VII.G.

	Number	(% Total)
0 Days or Fewer	121	(48.99)
1-364 Days	65	(26.32)
-2 Years	36	(14.57)
More than 2 Years	25	(10.12)
fotal	247	

Table 7 ve from Filing to Resolution in SFC Civil

Note: Cases include only civil actions brought in federal court without parallel criminal actions.

In terms of time to resolution, the SEC obtains significant advantages from relying on FINRA referrals. The cases in the dataset with FINRA referrals were resolved in an average of just 150 days. That was significantly less time than in the cases without FINRA referrals, which took more than twice as long (394 days) on average.³⁹⁴ These data are consistent with the idea that the FINRA referrals the SEC files are more certain, easier cases.

В. Targeted Defendants

The common trope in insider trading rhetoric is the director or high-level executive of a large, often well-known company, either trading on or tipping information. Such cases, however, are relatively uncommon (Table 8). Overall, just 10.3 percent of insider trading defendants were senior officers or directors. For cases enforced only through civil actions, officer and directors accounted for 12.8 percent of defendants. In most instances, these individuals were from smaller firms, where looser controls and less institutional ownership may make insider trading easier.³⁹⁵ For example, Anthony Andrade was an outside

^{394.} See supra Table 7. This difference is significant at less than 0.001.

^{395.} Larger firms typically have more institutional ownership and stronger governance controls. Insider trading appears to be more difficult and enforcement less prevalent in these settings. See Lauren Cohen et al., Decoding Inside Information, 67 J. FIN. 1009, 1020 (2012) (stating that the

director of a community bank who tipped three friends about the bank's impending acquisition.³⁹⁶ Frank Blystone was the chairman of the board and CEO of an oil and gas company who sold shares while in possession of MNPI about the firm's financial position.³⁹⁷

. .

Table 8 Types of Defendants						
	Over	all	Non-Criminal			
Officer and Director	48	(10.32)	12	(6.52)	36	(12.81)
Other Employee	71	(15.27)	30	(16.30)	41	(14.59)
SMP	100	(21.51)	68	(36.96)	32	(11.39)
Lawyer	13	(2.80)	8	(4.35)	5	(1.78)
Other Professional	30	(6.45)	10	(5.43)	20	(7.12)
Friends and Family	177	(38.06)	52	(28.11)	125	(44.64)
Other	26	(5.59)	5	(2.72)	21	(7.47)

Source: SEC Litigation Releases and filed case documents. Percentages may not add to 100 due to rounding. In some cases, data was unavailable for all defendants. As a result, the number of observations for some variables differs.

The more common defendants are mid-level company employees. Insider trading is thus less a violation of "the most advantaged, privileged, and wealthy insiders in modern finance,"³⁹⁸ and more one targeting middle managers. Overall, about 15 percent of insider trading defendants are nonexecutive officers employed by the corporate source.³⁹⁹ It is also not

number of insider buys is higher for smaller firms); Lee et al., *supra* note 315, at 167 (noting that probabilities of information-based trading are lower for large firms than for smaller firms).

^{396.} SEC Charges Director of Rhode Island Bank and Three Others With Insider Trading, Litigation Release No. 23278, 2015 SEC LEXIS 2271 (June 8, 2015).

^{397.} SEC Charges Former Oil Company Executive With Insider Trading, Litigation Release No. 22367, 2012 SEC LEXIS 1488 (May 11, 2012).

^{398.} Bharara, *supra* note 14.

^{399.} See, e.g., Complaint \P 2, SEC v. Fan, No. 11-cv-00096 (W.D. Wash. Jan. 19, 2011), ECF No. 1 (manager of clinical programming).

uncommon for lower level employees to face insider trading charges.⁴⁰⁰

The biggest differences between the subsamples of civil and criminal targets lie in two categories of defendants, SMPs and an amorphous group of "friends and family" who are often the recipients of improper tips. Case law, the U.S. Sentencing Guidelines, enforcement rhetoric, and the narrative conventions of insider trading typically portray insider trading by SMPs as more blameworthy than other kinds of improper trading. In that light and given that so much of the recent criminal crackdown targeted insider trading at hedge funds, it cannot be very surprising that SMPs appear three times more frequently in the sampled cases with criminal components. But those differences were not just byproducts of the crackdown. Even toward the end of the study period, when the crackdown had begun to taper off, SMPs appeared more frequently in criminal matters.⁴⁰¹ Of course, these defendants are not just the elite market participants of insider trading rhetoric. Prosecutors often target lower level employees from hedge funds and investment banks to obtain their cooperation.⁴⁰²

By contrast, the SEC cases are dominated by opportunistic tips passed to friends and family members. As Table 8 shows, 44.64 percent of the civil enforcement cases involved friends or family members trading on tips, often from mid-level corporate insiders. A typical example involved a marketing director who traded and then tipped his father-in-law when he learned that his company was about to be acquired.⁴⁰³ The significance of these kinds of tippees in the SEC's enforcement program highlights the importance of the Supreme Court's recent

^{400.} See, e.g., Complaint ¶ 3, SEC v. Vance, No. 13-cv-00172 (D. Or. Jan. 30, 2013), ECF No. 1 (IT employee).

^{401.} For FY 2014–2015, 30.43 percent of defendants in cases with criminal enforcement were SMPs compared to just 6.60 percent of cases without a criminal component.

^{402.} See, e.g., Information ¶ 1, United States v. Cardillo, No. 11-cr-00078 (S.D.N.Y. Jan. 26, 2011), ECF No. 4 (trader).

^{403.} See SEC Files Settled Insider Trading Action against Pharmaceutical Company Executive and His Father-In-Law, Litigation Release No. 22474, 2012 SEC LEXIS 2827 (Sept. 6, 2012).

 $Salman^{404}$ decision, which re-affirmed that a gift of inside information to a relative or friend could provide a basis for liability under Rule 10b-5.⁴⁰⁵

C. Insider Trading Activity

Insider trading can involve a range of conduct. The most serious cases involve complex networks of individuals who trade tips or SMPs who cultivate a wide array of sources at companies or expert network firms. In popular depictions, savvy market operators receive inside information from multiple, often unrelated sources, using their financial resources to earn enormous profits.⁴⁰⁶ To maximize returns, more sophisticated traders employ options or other derivative instruments rather than common shares. They take elaborate steps to disguise their trading, such as conducting it through offshore accounts,⁴⁰⁷ or using disposable cell phones⁴⁰⁸ or communicating in code.⁴⁰⁹ If an investigation is launched, they may lie to investigators, destroy evidence, or otherwise obstruct justice.⁴¹⁰ These factors are generally reflected in the U.S. Sentencing Guidelines as markers of more serious crimes warranting longer sentences.⁴¹¹

^{404.} Salman v. United States, 137 S. Ct. 420 (2016).

^{405.} Id. at 429.

^{406.} See supra Part II.A.

^{407.} See Affidavit of Special Agent Ryan Lane in Support of an Application for Criminal Complaint at 3–6, United States v. Kanodia, No. 15-cr-10131 (D. Mass. Apr. 1, 2015), ECF No. 3-1 (identifying three different brokerage accounts used in insider trading scheme).

^{408.} See Complaint ¶¶ 23–27, 32–34, United States v. Jorgenson, No. 14-cr-00120 (W.D. Wash. Dec. 17, 2013), ECF No. 1 (noting trading tactics).

^{409.} See Sealed Complaint ¶ 14, United States v. Zwerko, No. 14-cr-00715 (S.D.N.Y. Oct. 10, 2014), ECF No. 1 (explaining how traders operated their scheme).

^{410.} See Information $\P\P$ 4–6, United States v. Freeman, No. 11-cr-00116 (S.D.N.Y. Feb. 7, 2011), ECF No. 1 (witness tampering); Indictment $\P\P$ 9–11, United States v. Jiau, No. 11-cr-00161 (S.D.N.Y. Feb. 22, 2011), ECF No. 9.

^{411.} See U.S. SENT'G GUIDELINES MANUAL §§ 3B1.1, 3B1.3, 3C1.1 (U.S. SENT'G COMM'N 2018) (providing adjustments to the offense level based on the defendant's role in committing the offense such as aggravating role, abuse of position of trust, use of special skill, and obstructing and impeding the administration of justice).

But insider trading can also be a far simpler affair. A company employee may learn of an impending transaction and make a rash decision to buy shares.⁴¹² He (or occasionally she)⁴¹³ may tip the information to a friend, who may earn a small profit.⁴¹⁴ In a rational insider trading enforcement system, larger and more sophisticated schemes should be more likely to be subject criminal enforcement than smaller, less sophisticated one-off transactions.

The evidence suggests that enforcers reliably draw these distinctions. Civil insider trading cases typically involve a single incident of insider trading as opposed to systematic attempts to obtain and deploy MNPI. As shown in Table 9, nearly 80 percent of civil enforcement actions involve a single insider trading episode, with mean (median) events of 2.6 (1).⁴¹⁵ By contrast, the mean for criminal cases is 5.1, with a median of 3. While the differences between civil and criminal enforcement actions are significant, it is important to observe that the alleged activity may not be the best measure of the actual number of insider trading incidents. Proof problems or strategic litigation decisions may cause enforcers to allege fewer incidents than the number for which they have some evidence. Charging practices might also understate the differences between civil and criminal cases. Prosecutors may, for example, lodge fewer charges against cooperating witnesses in order to affect sentencing calculations. Still, the available evidence suggests purely civil cases general involve less serious violations. Overall, 79.7

^{412.} See, e.g., Complaint $\P\P$ 1–12, SEC v. Pupynin, No. 14-cv-07482 (S.D.N.Y. Sept. 16, 2014), ECF No. 1 (alleging that an IT employee at a law firm illegally purchased stock and stock options in companies that the law firm represented prior to their impending deal announcements).

^{413.} Insider trading defendants are overwhelmingly (95 percent) men. *See supra* Table 1 (showing that male defendants constitute 93.2 percent of civil enforcement cases and 97.3 percent of criminal enforcement cases).

^{414.} *See, e.g.*, Bolan, Exchange Act Release No. 73244, 2014 SEC LEXIS 5115 (Sept. 24, 2014) (reporting that a Wells Fargo employee leaked material nonpublic information to a trusted friend and a former colleague).

^{415.} The mean in civil enforcement actions is skewed by a single case in which employees of a credit card processing company were alleged to have used MNPI to trade on 140 separate occasions. See Complaint ¶¶ 1–5, SEC v. Huang, No. 15-cv-00269 (E.D. Pa. Jan. 21, 2015), ECF No. 1. Without that case, the mean for civil cases would be 1.6.

percent of civil cases with a single insider trading event involved MNPI about an impending M&A transaction, the quintessential one-off, opportunistic trade.

Panel A			
	Mean	Median	SD
IT Events **	3.59	1.00	10.27
Criminal	5.11	3.00	6.94
Noncriminal	2.59	1.00	11.86
Network Size ***	5.32	4.00	4.48
Criminal	7.46	5.00	5.34
Noncriminal	3.93	3.00	3.11
Panel B			
	Count	Percentage	by
		Case Type	
Security***			
Common Shares Only			
Criminal	64	34.59%	
Noncriminal	169	60.36%	
Options/Other Derivatives			
Criminal	26	14.05%	
Noncriminal	35	12.50%	
No Trading			
Criminal	54	29.19%	
Noncriminal	34	12.14%	
Common Shares & Options			
Criminal	41	22.16%	
Noncriminal	42	15.00%	
Concealment/Obstruction***			
Criminal	70	63.06%	
Noncriminal	41	36.94%	

Table 9Alleged Insider Trading Activity

Significance: * = 0.05 ** = 0.01 *** = 0.001

Source: SEC Litigation Releases and filed case documents.

In cases without criminal enforcement, the mean (median) size of the insider trading network was 3.92 (3) individuals. In criminal cases, by contrast, the mean (median) network contained 7.5 (5) traders. In other words, the insider trading that is subject to civil enforcement typically involves a small group of often closely linked individuals. For a standard scenario, consider the case of Loretta Itri, an executive of Genta. Inc., a now bankrupt biopharmaceutical company.⁴¹⁶ In October 2009, Genta announced that its Phase 3 trial for a melanoma drug in development had not shown any statistically significant benefit.⁴¹⁷ Given Genta's size and its reliance on the drug, the company's stock price dropped 70 percent after the announcement.⁴¹⁸ A day before, Dr. Itri disclosed the results to her friend and medical school classmate who in turn tipped his patient.⁴¹⁹ As is typical for civil cases, Dr. Itri learned one piece of MNPI.⁴²⁰ There was no scheme to traffic in multiple pieces of MNPI.

One proxy for sophistication is the type of security traded. The least sophisticated traders employing MNPI are most likely to trade common shares, even though options or other derivatives might yield greater returns. Enforcement actions against such traders are significantly more likely to be civil rather than criminal. As Table 9 shows, more than 60 percent of defendants in civil cases traded only common stock, compared to just 35 percent of criminal defendants. With larger, more complex networks, criminal defendants are more likely to be either tippers or SMPs, who trade not for their own accounts but for the accounts of their firm or their clients.

A final significant difference between criminal and civil enforcement is the frequency of allegations that the defendants took steps to conceal their activity or obstruct the investigation. Table 9 shows that these allegations are made against a

^{416.} See Complaint at 3, SEC v. Itri, No. 14-cv-02525 (D.N.J. Apr. 21, 2014), ECF No. 1.

^{417.} See id. at 4-5.

^{418.} See id. at 5.

^{419.} Dr. Moskowitz allegedly advised three other unspecified individuals to sell Genta stock after learning MNPI from Dr. Itri. The SEC did not pursue claims against those individuals. *Id.* at 8–9.

^{420.} See id. at 8.

significantly higher percentage of criminal defendants (63.1 percent) than civil ones (36.9 percent). Typical examples include trading through unrelated or offshore accounts, using disposable cell phones, communicating in code language, and lying to investigators or destroying documents.⁴²¹ Facts like these are important in criminal cases, where the government is required to prove that the defendant acted willfully.⁴²² Courts generally require the defendant's awareness that she was engaged in a wrongful or unlawful act.⁴²³ Elaborate efforts to avoid detection provide circumstantial evidence of willfulness. Likewise, actions to cover-up wrongdoing in the face of an investigation may be admissible as evidence of the defendant's consciousness of guilt, further bolstering the government's case.⁴²⁴

D. Tippers, Tippees, and Remote Tippees

The most rudimentary insider trading cases involve a single individual who learns MNPI and trades on it. An only slightly more complicated case involves an individual who learns MNPI and, rather than or in addition to trading, passes it on to another who trades. If the original source was Level 0, the immediate tippee is Level 1. Level 1 defendants might also be thought to include individuals who misappropriate information from a source to whom they owe a duty.

^{421.} See cases cited supra notes 407–410.

^{422.} See Samuel W. Buell, Novel Criminal Fraud, 81 N.Y.U. L. REV. 1971, 2007–08 (2006) (explaining that the Supreme Court has generally required proof of willfulness in cases alleging white collar crimes).

^{423.} See United States v. Kaiser, 609 F.3d 556, 569 (2d Cir. 2010) (concluding that willfulness only requires an awareness of the general wrongfulness, not unlawfulness, of conduct); United States v. Cassese, 428 F.3d 92, 98 (2d Cir. 2005) (defining willfulness as "a realization on the defendant's part that he was doing a wrongful act" (quoting United States v. Peltz, 433 F.2d 48, 55 (2d Cir. 1970))).

^{424.} See United States v. Blackwell, 459 F.3d 739, 761 (6th Cir. 2006) (finding that spoilation of evidence is relevant to consciousness of guilt); United States v. Martoma, No. 12-cr-00973, 2014 WL 31700, at *1 (S.D.N.Y. Jan. 6, 2014) ("Evidence of a party's consciousness of guilt may be relevant if reasonable inferences can be drawn from it and if the evidence is probative of guilt." (quoting United States v. Perez. 387 F.3d 201, 209 (2d Cir.2004))).

From those simple cases, it is easy to increase the complexity. There could be multiple Level 0 sources or multiple Level 1 tippees, all of whom learned the MNPI from the same source. Any of the Level 1 tippees could pass the MNPI to a Level 2 tippee, and any of those could pass it to a Level 3 tippee and so on. Generally speaking, any tippee who receives the information from another tippee is defined as a remote tippee.⁴²⁵ Theoretically, the chain could continue indefinitely.

Since the early 1980s, the Supreme Court's *Dirks v.* SEC^{426} decision governed tipper-tippee liability. It requires that the tipper receives a direct or indirect personal benefit for the tip.⁴²⁷ For much of that time, proving benefit was not difficult, with courts often accepting that rather tenuous benefits satisfied the *Dirks* standard.⁴²⁸ Indeed, the standard was so weak that in many cases in the dataset there was no alleged benefit.⁴²⁹ In 2014, however, the Second Circuit decided *United States v. Newman*,⁴³⁰ a case involving Level 3 and 4 tippees.⁴³¹ There, the court tightened the benefit requirement. Inferring a benefit from a gift of insider information, the court held, was only permissible if the government could prove "a meaningfully close personal relationship that generates an exchange that is objective, consequential, and represents at least a potential gain of a pecuniary or similarly valuable nature."⁴³²

Newman spawned a cottage industry of commentary, with various takes on the correctness of the decision and its potential

^{425.} See Salman v. United States, 137 S. Ct. 420, 426 (2016) (defining a remote tippee as a "tippee]] who receive[s] inside information from another tippee, rather than the tipper").

^{426. 463} U.S. 646 (1983).

^{427.} See *id.* at 663–64 (stating that the initial inquiry is "whether the insider receives a direct or indirect personal benefit from the disclosure").

^{428.} See United States v. Jiau, 734 F.3d 147, 153 (2d Cir. 2013) (stating that personal benefit included free meals, jars of honey, and live lobsters).

^{429.} See, e.g., Complaint ¶¶ 1–4, SEC v. Amin, No. 12-cv-03960 (C.D. Cal. May 7, 2012), ECF No. 1.

^{430. 773} F.3d 438 (2d Cir. 2014), overruled in part by Salman v. United States, 137 S. Ct. 420 (2016).

^{431.} See *id.* at 443 ("Newman and Chiasson were several steps removed from the corporate insiders and there was no evidence that either was aware of the source of the inside information.").

^{432.} Id.

impact on enforcers.⁴³³ Some thought the decision was appropriate because enforcers pursued overly aggressive actions against individuals far removed from the source of the information.⁴³⁴ In 2016, the Supreme Court reaffirmed *Dirks*' gift test.⁴³⁵ The Second Circuit continued to debate what if anything remained of the stricter scrutiny *Newman* signaled.⁴³⁶

The concern exhibited about remote tippees, however, is wildly out of proportion to their actual significance in insider trading enforcement actions. As shown in Table 10, a little over 71 percent of defendants are Level 0 or 1, that is, individuals who were either the original source of the MPNI or learned of it directly from that source. In other words, seven out of ten defendants are not remote tippees. When remote tippees do appear in enforcement cases, they are typically not far removed from the original source. Over 72 percent of remote tippees are Level 2 tippees, individuals who are only one step removed from the original source of the information. Indeed, more than 92 percent of defendants are Level 2 or closer. In the sample, there were only thirty-seven defendants who were Level 3 or beyond.

^{433.} See Michael D. Guttentag, Selective Disclosure and Insider Trading, 69 FLA. L. REV. 519, 569–70 (2017) (concluding that the personal benefit test is no longer useful and necessary to find tipper-tippee liability); see generally Nagy, supra note 115, at 28–29 (discussing the implications of the Salman case).

^{434.} See Macey, *supra* note 30, at 68–69 (stating that *Newman* recognized the valid reasons why corporate insiders would disclose MNPI to capital market participants in advance of its general release to the public).

^{435.} See Salman v. United States, 137 S. Ct. 420, 427–28 (2016) (reaffirming *Dirks*' test that a tipper breaches a fiduciary duty by making a gift of confidential information to "a trading relative").

^{436.} See United States v. Martoma, 869 F.3d 58, 69 (2d Cir. 2017) ("Salman fundamentally altered the analysis underlying Newman's 'meaningfully close personal relationship' requirement such that the 'meaningfully close personal relationship' requirement is no longer good law."), vacated on other grounds, No. 14-3599, 2018 U.S. App. LEXIS 37437 (2d Cir. June 25, 2018).

Insider Trading Defendant Levels						ls
Level	Overa	11	Pre-N	Pre-Newman		Newman
0	151	(32.47)	137	(33.83)	14	(23.33)
1	181	(38.92)	154	(38.02)	27	(45.00)
2	96	(20.65)	77	(19.01)	19	(31.67)
3	24	(5.16)	24	(5.03)	0	(0.00)
4	12	(2.58)	12	(2.96)	0	(0.00)
5	1	(0.22)	1	(0.25)	0	(0.00)
Total	465		405		60	

Table 10

These results are consistent with the view that enforcers tend to pursue relatively routine cases where the likelihood of liability is higher. Even before Newman, the farther the defendant was from the source of the information, the harder it was for enforcers to show the elements for tipper-tippee liability. But even more importantly, these results demonstrate that enforcers are responsive to judicial efforts to rein in what they perceive to be aggressive enforcement efforts. Before Newman, cases against tippees who were Level 3 or greater were rare, occurring in just 9.1 percent of cases. After Newman, civil or criminal enforcement authorities did not file a single action against such a defendant. After Newman, the only cases in the dataset that civil and criminal enforcement authorities brought against remote tippees were against Level 2 traders.

Given the anecdotal evidence regarding enforcers' risk aversion, it seems reasonable to attribute the relative paucity of cases against remote tippees to their reluctance to bring risky cases. In civil cases in the dataset involving Level 0-2 defendants, the SEC prevailed in 93.5 percent of the cases. When it pursued actions against Level 3–5 defendants, its win rate dropped to 83.8 percent, a difference that is significant at less than 5 percent. The same is true in criminal cases. Prosecutors obtained convictions or pleas in over 90 percent of the cases they brought against Level 0 or 1 defendants. Those rates dropped to 79.0 percent for Level 2 defendants, 64.7 percent for Level 3 defendants, and 28.6 percent for Level 4 defendants.⁴³⁷ In other words, Newman appears to have

^{437.} Prosecutors did not charge any defendants beyond Level 4.

reinforced the already strong incentives not to pursue cases against remote tippees. These data, in other words, provide strong evidence for the law-making partnership model that Professors Fisch and Nagy have articulated.⁴³⁸

E. Insider Trading Profits

As Table 11 shows, on average criminal cases involve more profitable insider trading episodes than civil ones. There are no significant differences in the traders' direct profits between these subsets. But with the larger networks and increased presence of SMPs in criminal cases, the downstream profits—defined as the sum of profits earned by all individuals who traded on the information as a result of a direct or indirect tip from the defendant—are significantly larger. Downstream tippees in criminal cases have mean profits of around \$7.05 million, compared to \$1.55 million in civil cases.

Table 11
Alleged Profits in Insider Trading Enforcement
Actions

	Actions		
	Mean	Median	SD
Direct Profits	992.68	58.87	7,365.75
Criminal	817.97	130.75	2,749.51
Noncriminal	1,105.62	46.73	9,194.64
Downstream Profits ***	3,689.65	5.55	20,434.800
Criminal	7,046.95	642.98	24,318.00
Noncriminal	1,555.37	0.00	17,235.00

Significance: * = 0.05 ** = 0.01 *** = 0.001

Source: SEC Litigation Releases and filed case documents. Profits are in constant 2016 dollars reported in thousands.

What is even more notable than the disparities between civil and criminal cases are how skewed the data on insider trading profits are. The average direct profit for the sample is \$992,680, but the median profit is only \$58,870. In part, this is

^{438.} See supra Part II.B.

due to the presence of a significant number of tippers, who often have no alleged trading profits. But it is also the case that most defendants earn comparatively small profits while a handful of traders earn substantial ones. The interquartile range for direct profits is \$11,586 to \$261,821. By contrast, the 99th percentile is \$16.6 million. Or, to put it another way, the total direct profit of all insider trading defendants in the sample was \$457.6 million. A subset of just five traders (about 1 percent of the sample) had direct profits totaling \$255.7 million, or 55.9 percent of the total.

Although not as skewed as direct profits, the same general pattern applies to downstream profits. Indeed, the median downstream profit in civil cases is \$0, further supporting the hypothesis that civil cases tend to involve one-off claims against individuals rather than systematic schemes involving networks of traders. Overall, the interquartile range for downstream profits is \$0 to \$656,826. The 99th percentile is one-hundred times larger at \$65.6 million.

It is the cases with small direct and downstream profits that dominate the civil cases settled within thirty days of filing. Recall that nearly half of the SEC's cases settle within that short timeframe.⁴³⁹ Given the small amounts at stake in these cases and the high costs of litigation, it seems reasonable to assume that enforcement officials can anticipate that defendants will be willing to settle them expeditiously. The mean (median) direct profits for defendants in those cases is \$118,505 (\$37,657). The median defendant in these cases was a solitary trader who did not tip and who therefore generated no downstream profits. In short, the SEC's insider trading enforcement docket is dominated by defendants who earned small profits from their own trading and who settle quickly.

F. Are Criminal Cases Different?

Are criminal prosecutions reserved for more serious cases of insider trading, as the foregoing univariate data suggest? Table 12 reports the results of a logistic regression with criminal enforcement as the dependent variable. The results show

^{439.} See supra Table 7.

significant differences between civil and criminal cases, which suggest that criminal actions are generally reserved for more serious insider trading episodes. All else being equal, defendants who participate in larger networks and obtain larger direct and downstream profits have significantly greater odds of being criminally prosecuted. The significant result for Level reflects the same association between complex trading networks and the likelihood of criminal prosecution. Facts suggesting knowingly wrongful conduct also increase the likelihood of criminal prosecution. The odds that defendants who are alleged to have engaged in attempts to conceal their activities or obstruct an investigation will face criminal prosecution are about four times higher than those without such allegations. More sophisticated defendants (as measured by the kinds of securities traded) face higher odds of criminal prosecution as well.

The regression results only partially support the rhetoric that criminal prosecutions target the "most advantaged, privileged, and wealthy insiders in modern finance."440 This is certainly true of SMPs, whose odds of facing criminal prosecution are over four times greater than the reference category of miscellaneous defendants. There is similarly some evidence that criminal enforcement authorities target substantial fiduciary breaches. Lawyers alleged to have engaged in insider trading are six times more likely than other defendants to face criminal prosecution, although that correlation is only significant at 10 percent. But there is no statistically significant relationship between criminal prosecution and being a director or officer, a result that may be driven by the paucity of such defendants in the dataset.

440. Bharara, *supra* note 14.

Table 12 Logistic Regression Criminal Enforcement					
	Odds	Robust	95%	Confidence	
	Ratio	SE	Interv	al	
Network Size	1.184	(.046)***	1.097	1.277	
IT Events	1.014	(.011)	0.993	1.204	
Level	1.519	(.282)*	1.055	2.186	
Defendant Type					
Officer/Director	2.111	(1.574)	0.490	9.099	
Other Employee	2.181	(1.603)	0.516	9.211	
SMP	4.589	(2.821)**	1.375	15.311	
Lawyer	5.928	(6.572)	0.765	52.067	
Other Professional	1.013	(0.793)	0.219	4.697	
Friends & Family	1.545	(0.874)	0.510	4.679	
MNPI					
Financial	1.586	(0.997)	0.462	5.437	
M&A Activity	1.550	(0.873)	0.514	4.676	
Product Approval	1.996	(1.534)	0.440	9.052	
Security					
Options/Derivatives	2.480	(0.966)*	1.156	5.319	
No Trading	2.918	(1.364)*	1.167	7.293	
Common Shares & Options	2.904	(1.123)**	1.361	6.195	
Log Direct Profit	1.101	(0.040)**	1.026	1.182	
Log Downstream Profit	1.151 1.154	(0.027)***	1.1020	1.209	
Concealment/Obstruction	4.485	(1.294)***	2.439	8.246	
Gender	0.294	(0.230)	0.635	1.365	
Constant	0.003	(0.003)***	0.000	0.019	
Observations	457	. ,			
Wald χ^2	126.54				
Prob > χ^2	0.000				
Pseudo r^2	0.360				
Significance: $* = 0.05$ ** = 0.0		1			

Table 19

Significance: * = 0.05 ** = 0.01 *** = 0.001

While it is certainly possible to question the resources the SEC devotes to small insider trading matters and whether that allocation makes sense in light of the agency's deterrence and other goals, the evidence at least suggests a reasonable allocation between civil and criminal cases. The SEC focuses its efforts on smaller, often opportunistic cases where there seems little risk that the defendants will have the opportunity to engage in future violations. After all, how many times will a middle manager learn that his company is about to be acquired? If enforcers make the decision to pursue such cases, civil, rather than criminal, enforcement seems entirely appropriate.

This analysis also suggests that market participants have relatively clear notice of the activities that will lead to criminal enforcement. Criminal enforcement is more likely to target more systematic and sophisticated insider trading episodes and those where the profits were higher. Consistent with enforcement rhetoric, SMPs should be aware that they face a much higher likelihood of prosecution than other market participants.

G. The SEC and Low Hanging Fruit

A good deal of the univariate data reported in this section suggests that the SEC pursues relatively straightforward cases that it believes will be resolved quickly and easily. The SEC cases are dominated by isolated instances of opportunistic trading. They often involve mid-level employees or their friends and family, come from referrals from FINRA, and have relatively small profits. But for SEC attorneys to target incidents they think will be resolved without much litigation effort requires that they have the ability to identify observable case characteristics associated with quick settlements. Are there pre-filing case characteristics that are correlated with the length of litigation?

To analyze that question, I ran linear regressions with *Civil Case Length* (the time in days from the date the SEC files the complaint until the final judgment is entered) as the dependent variable. The only variables included in the analysis (with one exception) are those SEC enforcers could observe prior to case filing. The exception is whether there is a criminal enforcement action involving the same defendant, which may not be filed until after the SEC action. Criminal cases, however, almost invariably result in the stay of civil proceedings, making criminal enforcement a necessary control variable. The results appear in Table 13.

There are two main results for Model 1. First, *Civil Case Length* is positively correlated with the total profits the defendants in the insider trading network earned. Not surprisingly, the larger the profits the longer the case takes to resolve, all else being equal. Second, cases with FINRA referrals settle much more quickly. On average, a case with a FINRA referral is resolved 153 days faster (about five months) than cases without such referrals. That means SEC enforcement attorneys can reliably predict that the small cases they get from FINRA will be resolved quickly, with minimal post-filing effort and with little risk of loss.

But the ease with which the SEC can expect to settle a case will likely depend not just on these isolated factors, but on a combination of case characteristics. To test this theory, Model 2 contains interaction terms for two key variables—the type of security the defendant traded and the nature of the MNPI. In Model 2, both *Total Profit* and *FINRA* remain significant and with the same sign as Model 1. But Model 2 also contains evidence that the SEC has the ability to identify case characteristics that are correlated with speed of resolution. Cases that feature common share trading before M&A activity settle significantly more quickly than other cases. The same is true of cases involving defendants who trade either common shares or a combination of shares and options before product approval announcements.

Linear Regression Civil Case Length					
	Model 1		Model 2		
	Coef.	Robust SE	Coef.	${\rm Robust}~{\rm SE}$	
Log Total Profit	39.781	(14.367)**	39.184	(14.364)**	
Defendant Type					
Officer/Director	138.479	(117.781)	128.741	(122.537)	
Other Employee	-24.859	(104.257)	-46.040	(104.549)	
SMP	107.820	(97.580)	79.531	(100.470)	
Lawyer	-9.472	(149.013)	-47.190	(155.277)	
Other Professional	-96.642	(99.254)	-111.978	(101.113)	
Friends & Family	93.365	(89.476)	84.685	(93.0523)	
Criminal Enforcement	234.955	(74.814)**	254.608	(74.875)***	

Table 13 Linear Regression Civil Case Length

	Model 1		Model 2	
	Coef.	Robust SE	Coef.	Robust SE
FINRA	-152.675	(56.128)**	-149.393	(56.152)**
ORSA	94.587	(56.020)	91.596	(56.275)
FBI	77.328	(60.654)	59.334	(63.491)
IT Events	-1.957	(1.247)	-1.517	(1.353)
Network Size	-4.892	(6.199)	-1.164	(6.351)
Level	-1.968	(30.201)	-4.548	(30.379)
Concealment/Obstruction	27.766	(54.204)	33.195	(55.046)
Security				
Common Shares	46.888	(69.786)	537.340	(212.290)*
Options/Derivatives	121.326	(99.059)	355.951	(318.866)
Common Shares & Options	88.942	(81.395)	223.577	(147.003)
MNPI				
Financial	-155.188	(133.477)	117.693	(114.575)
M&A Activity	-182.358	(121.586)	277.061	(122.671)*
Product Approval	-191.357	(157.201)	248.662	(190.556)
Interaction Terms				
Financial x Common Shares			-365.929	(235.156)
Financial x			-127.147	(350.019)
Options/Derivative				
Financial x Common Shares			114.362	(176.046)
& Options				
M&A x Common Shares			-566.695	(207.147)**
M&A x Options/Derivative			-315.768	(331.801)
M&A x Common Shares &			-222.253	(168.796)
Options				
Product Approval x Common			-571.942	(279.855)*
Shares				
Product Approval x			0.000	(omitted)
Options/Derivative				
Product Approval x Common			-448.489	(224.441)*
Shares & Options				
Constant	-95.440	(219.761)	0.000	0.019
Observations	403		403	
<u>r²</u>	0.259		0.276	

 $\frac{r^2}{\text{Significance: } * = 0.05 * * = 0.01 * * * = 0.001}$

As discussed in Part V, these cases tend to involve indisputable MNPI. M&A cases dominate the SEC docket.441 These factors, along with the fact that the SEC tends to pursue cases with comparatively small profits involving trading exclusively in common shares,442 typically by lower level employees and their friends and families,⁴⁴³ all support the same hypothesis. Not only does the SEC have the ability to identify obvious cases of insider trading that are likely to settle quickly, but these cases dominate the SEC's docket. To be sure, the reasons that shape SEC case selection remain uncertain. This pattern of cases could just as easily support an inference of an administrative agency looking to pad its enforcement statistics or conserve scarce trial resources as it could loss averse enforcement personnel making overly conservative case choices. Perhaps all of these factors are at work. But the bottom line remains the same-civil insider trading enforcement focuses predominantly on the lowest hanging fruit.

VIII. Conclusion

There is a large gap in the debate on insider trading enforcement. The enforcement rhetoric focuses on policing market fairness by targeting SMPs and other elite market participants. Academic critiques vary, alternatively portraying a largely untethered insider trading doctrine that enforcers use to expand their power and discretion or enforcers, beset with agency cost problems, that bring simple, easily resolved cases to create the appearance of vigorous enforcement.

This Article has sought to close that gap by a careful analysis of insider trading enforcement data. The overall pattern that emerges from these data is clear. Enforcement authorities concentrate their efforts on cases involving unquestionable MNPI. For the most part, they focus on traditional fiduciary or other duties of trust and confidence,

^{441.} See supra Table 2.

^{442.} See supra Table 9 (showing that 34.5 percent of criminal cases and 60.36 percent of noncriminal cases involved trading exclusive in common shares).

^{443.} See supra Table 8 (showing that 38.06 percent of overall cases involved trading with friends and families).

although civil enforcement authorities appear more willing to expansively apply Rule 10b5-2. Both civil and criminal enforcers appear to focus their efforts on fairly routine cases of insider trading. Especially on the civil side, those cases typically are brought against mid-level employees and their friends and family, who have earned comparatively low profits usually in one-off transactions rather than through systematic insider trading schemes. These cases are routinely settled within days of filing. Enforcers infrequently bring claims against remote tippees and carve back on such cases when they perceive stricter scrutiny from the judiciary. There are significant differences between criminal and civil cases, with the former focusing largely on what appear to be more serious insider trading episodes.

None of these data suggest any meaningful doctrinal overreach, and thus there seems little reason to define these elements more precisely via specific statutory language. Indeed, the pattern of cases suggests that market participants can anticipate with a fair degree of certainty the kinds of activities that will be subject to governmental enforcement, both civilly and criminally. And, if anything, the data suggest that the SEC focuses too many of its enforcement resources on the least sophisticated episodes of insider trading. The analysis here shows that the agency devotes a substantial portion of its resources to cases that it can anticipate will settle quickly and easily. These enforcement practices raise substantial concerns about the deterrent impact of the SEC's insider trading cases.

This Article has only begun to analyze insider trading enforcement and many questions remain unanswered. Future research, for example, can analyze how insider trading is punished and whether the panoply of available penalties-incarceration, supervised release, disgorgement, and civil and criminal fines—are employed consistently across defendants. To the extent that researchers can gain access to SRO referrals or SEC investigative files, they could better analyze how cases are selected for enforcement. A larger dataset extending over multiple administrations may also reveal the extent to which enforcement priorities shift over time.

Category/ Variable	Туре	Description	Source
Litigation			
Characteristics			
FINRA	Categorical	1 if FINRA made a referral to the SEC and 0 otherwise.	SEC Litigation Releases
FBI	Categorical	1 if the FBI or US Attorneys made a referral to the SEC and 0 otherwise.	SEC Litigation Releases; US Department of Justice Press releases
ORSA	Categorical	1 if the Options Regulatory Authority made a referral to the SEC and 0 otherwise.	SEC Litigation Releases
Market Abuse	Categorical	1 if the SEC's Market Abuse Unit assisted in the investigation and 0 otherwise.	SEC Litigation Releases
Lag	Continuous	Time in days between first alleged insider trading incident and filing of first action against defendant.	SEC Complaint; SEC Order Instituting Proceedings; Criminal Indictment or Information; <i>Bloomberg</i> Dockets
Case Length	Continuous	Time in days from when the action is commenced until the final judgment (civil cases), sentencing (criminal cases), or other resolution (administrative actions).	SEC Complaint; SEC Order Instituting Proceedings; Criminal Indictment or Information; Bloomberg Dockets
Enforcement Type	Categorical	Indicator variable for any of the following	Bloomberg Dockets

Appendix: Data Definitions

Defendant		potential enforcement types: (1) civil only; (2) criminal only; (3) SEC administrative action only; (4) civil and criminal; (5) civil and administrative; (6) civil, criminal, and administrative, and (7) criminal and administrative.	
Characteristics			
Defendant Type	Categorical	Indicator variable for the following categories of defendants, defined through either their relationship to the source of the information or through their occupation: (1) Officers and Directors; (2) Other Employee; (3) Securities Market Professional (SMP); (4) Lawyer; (5) Other Professional; (6) Friends and Family; or (7) Other. Officers and Directors include only members of the board and the most senior executives of the firm, including the CEO, CFO, COO, and the General	SEC Order Instituting Proceedings; Criminal
Gender	Categorical	Counsel. Male or female defendant.	SEC Complaint; SEC Order Instituting Proceedings; Criminal

			Indictment or
			Information
Direct Profits	Continuous	The total profits the	SEC Complaint;
Direct 1 rojuto	commuous	named defendant is	SEC Order
		alleged to have earned	Instituting
		from improper insider	Proceedings;
		trading activity in	Criminal
		inflation-adjusted 2016	Indictment or
		dollars.	Information
Description	C		
Downstream	Continuous	The total profits of all	SEC Complaint;
Profits		traders who learned,	SEC Order
		either directly or	Instituting
		indirectly, the MNPI	Proceedings;
		from the named	Criminal
		defendant in inflation-	Indictment or
		adjusted 2016 dollars.	Information
Nature of			
Allegations			
Basis of	Categorical	Activity in which	SEC Complaint;
Liability		defendant was alleged to	SEC Order
		have engaged: (1)	Instituting
		trading; (2) tipping only;	Proceedings;
		(3) trading after tip; and	Criminal
		(4) trading and tipping.	Indictment or
			Information
IT Events	Continuous	The number of separate	SEC Complaint;
		incidents of trading or	SEC Order
		tipping associated with	Instituting
		each piece of MNPI in	Proceedings;
		the defendant's	Criminal
		possession. For example,	Indictment or
		if the defendant learns a	Information
		single piece of MNPI and	
		trades on it, IT Events	
		will be 1 regardless of	
		how the trader divides	
		up the trading activity.	
		If the trader also tips a	
		single individual, <i>IT</i>	
		<i>Events</i> will equal 2.	
		Dienio will equal 2.	

Network Size	Continuous	The number of individuals participating in the alleged insider trading scheme.	SEC Complaint; SEC Order Instituting Proceedings; Criminal Indictment or
Security	Categorical	Indicator variable defining the securities the defendant either purchased or sold: (1) common shares only; (2) options or other derivative securities; (3) a combination of common shares and options; or (4) no trading. The no trading category is used in two situations: (1) defendants who tip but do not trade or (2) defendants who do not trade for their own account. The latter category would include, for example, a hedge fund portfolio manager who traded for his or her fund but not for his or her own account. If the defendant had multiple insider trading events, only the largest trade (measured by profit) was	Information SEC Complaint; SEC Order Instituting Proceedings; Criminal Indictment or Information
Concealment/ Obstruction	Categorical	coded. 1 if there is any allegation of such conduct and 0 otherwise. Examples include using	SEC Complaint; SEC Order Instituting Proceedings;

1744

REAL INSIDER TRADING

		coded language or	Criminal
		disposable cell phones,	Indictment or
		lying to investigators, or	Information
		destroying documents.	
Level	Continuous	Measure of the	SEC Complaint;
		defendant's distance	SEC Order
		from the original source	Instituting
		of the information. 0	Proceedings;
		represents the original	Criminal
		source of the	Indictment or
		information. 1 includes	Information
		both direct tippees and	linormation
		those who	
		misappropriate	
		information from the	
		original source.	
MNPI	Categorical	Indicator variable	SEC Complaint;
1/11/11	Categoricai	defining the type of	SEC Complaint, SEC Order
		material nonpublic	Instituting
		information the	Proceedings;
		defendant possessed.	Criminal
		The categories are as	Indictment or
		follows: (1) M&A	Information
			Information
		activity; (2) financial	
		information; (3) product	
		approval; or (4) other. If	
		the defendant had	
		multiple insider trading	
		events, only the largest	
		trade (measured by	
	~	profit) was coded.	
Industry	Categorical	Industry in which the	EDGAR; Mergent
		company operated. If the	Intellect
		defendant had multiple	
		insider trading events,	
		only the largest trade	
		(measured by profit) was	
		coded.	
Duty	Categorical	In misappropriation	SEC Complaint;
		cases, the nature of the	SEC Order

duty the defendant is	Instituting
alleged to have violated.	Proceedings;
The categories are as	Criminal
follows: (1) employment;	Indictment or
(2) other traditional	Information
fiduciary duties	
(including, lawyer-client	
or doctor-patient); (3)	
family relationship; (4)	
friendship; (5)	
confidentiality	
agreement; or (6) other.	

1746