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THE TENSION BETWEEN HEDGE FUND ACTIVISM AND CORPORATE LAW

Bernard S. Sharfman*

ABSTRACT

This Article presents the following thesis: The courts will be overpermissive in allowing Boards to mute the activities of activist hedge funds unless the courts start to recognize the value of hedge fund activism (HFA) as a corrective mechanism and thereby feel the need to make an exception to their traditional approach to judicial review—strong deference to Board authority. We have already seen evidence of the courts not recognizing the value of HFA in *Third Point LLC v. Ruprecht*, a case where the Delaware Chancery court reviewed with approval a discriminatory poison pill meant to keep an activist hedge fund from winning a proxy contest.

In the limited fact patterns where Board actions are taken to mute the activities of activist hedge funds, continued strong deference to Board authority would be a repetition of the mistake made with hostile tender offers and be counter to the objective of shareholder wealth maximization. HFA has a role to play as a corrective mechanism in corporate governance and it is up to the courts to find a way to make sure it continues to have a significant impact despite the courts' inclination to yield to Board authority. In practice, this means that when the plaintiff is an activist hedge fund and the standard of review is the *Unocal* test because issues of control are present, a less permissive approach under this test needs to be applied, requiring the courts to exercise restraint in interpreting the actions of activist hedge funds as an attempt to gain control.

If there are no issues of control in fact patterns where Board actions are taken to mute the activities of activist hedge funds, then Board independence and reasonable investigation should still be the focus. That is, before the business judgment rule can be applied, the courts need to

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utilize an enhanced level of scrutiny in determining whether the Board is truly independent of executive management or any other insider such as a fellow Board member. As discussed in the Article, Board independence is critical to maximizing the value of HFA. Moreover, reasonable investigation of the activist hedge fund's recommendations should be required to justify Board action taken to mute the fund's influence. Like the *Unocal* test, the burden of proof for establishing independence and reasonable investigation needs to be put on the Board. In sum, what is required in the court's review of Board actions taken to mute the influence of activist hedge funds where no issues of control are present is something similar to the first prong of the *Unocal* test except independence and reasonable investigation is now focused on the Board's evaluation of the fund's recommendations, not the threat to corporate policy and effectiveness.

INTRODUCTION

What role is an activist hedge fund to play in the decision making of a public company? That question is very simple to answer. If a public company is organized as a corporation, which is very likely, and it has not opted out of the default rule that provides managerial control of the company to the board of directors (Board), which is even more likely, then, like any other shareholder, the activist hedge fund can, at most, play only an advisory role. That is, even if the activist hedge fund yells and screams about the company's poor performance, publicly insults the current Board and executive management, or threatens a proxy contest to replace some or all of the current members of the Board with its own nominees, it is not provided any decision making authority under corporate law.

Therefore, the real corporate governance issue that needs to be addressed is the following: to what extent may a Board act to reduce an activist hedge fund's influence in company decision making? Like defensive measures that are used by the Board to defend against a hostile bidder, such as the poison pill, this question will ultimately be answered by the judiciary in its statutory interpretation of corporate law's default rule that provides the Board with ultimate management authority. For purposes of this Article, that default rule is Delaware General Corporation Law (DGCL) §141(a): "The business and affairs of every corporation organized under this chapter shall be managed by or under the direction of a board of

¹ "A public company can be defined as a for-profit corporation that is publicly traded on a national exchange or over-the-counter but does not have a controlling shareholder. This type of company is susceptible to the influence of an activist hedge fund." Bernard S. Sharfman, *Activist Hedge Funds in a World of Board Independence: Creators or Destroyers of Long-Term Value?*, 2015 COLUM. BUS. L. REV. 813, 822 (2016) [hereinafter Sharfman, *Activist Hedge Funds*].

directors, except as may be otherwise provided in this chapter or in its certificate of incorporation."²

The judicial review of Board decision making is built on an approach that provides great deference to Board authority. For the overwhelming majority of potential fact patterns, this deferential approach enhances the decision making of public companies and helps move them to shareholder wealth maximization, the objective of Board authority. However, hedge fund activism (HFA), with numerous empirical studies that attests to its role in enhancing shareholder value and target company performance, legitimately questions the value of that deferential approach in some exceptional but very important fact patterns.

The thesis of this Article is as follows: the Courts will be overpermissive in allowing Boards to mute the activities of activist hedge funds unless the courts start to recognize the value of HFA as a corrective mechanism and thereby feel the need to make an exception to their traditional approach to judicial review—strong deference to Board authority. We have already seen evidence of the courts not recognizing the value of HFA in *Third Point LLC v. Ruprecht*,³ a case where the court reviewed with approval a discriminatory poison pill meant to keep an activist hedge fund from winning a proxy contest.⁴

There are four important observations about corporate law that support this thesis. First, the default rules of statutory corporate law explicitly provide the Board with unlimited authority to manage the public company. Without modification of this default rule, there is no place for an activist hedge fund in the decision making of a corporation. Second, the parties to the corporate contract of a public company never modify the Board's statutory authority in any substantive way. The courts understand that this private ordering is being sanctioned by statutory corporate law and will feel compelled to act aggressively to protect Board authority. Third, the courts also understand, because of the inherent limitations of being a judge and not a business leader, that the Board and its executive officers are in the best position to determine if a corporate decision is wealth maximizing and feel compelled to defer to their expertise. Fourth, the first three observations imply that when the courts review a Board decision, it will provide strong deference to Board authority. Therefore, even though it has created fiduciary duties to constrain the potentially unlimited power of the Board, it will apply them in a very gentle way. That is, the plaintiffs will have a hard time satisfying the court that the Board has breached its duties. evidence for this is found in the traditional application of the business judgment rule and the permissive *Unocal* test. This traditional approach to judicial review, without modification, implies judicial restraint in finding a

⁴ Id

² DEL. CODE ANN. tit. 8, § 141(a) (2011).

³ Third Point LLC v. Ruprecht, No. 9469-VCP, 2014 WL 1922029 (Del. Ch. May 2, 2014).

breach in fiduciary duties when the Board takes actions meant to mute the activities of an activist hedge fund, even when it is clear that the activist hedge fund is acting as a corrective mechanism in corporate governance.

The discussion that follows, when it references state corporate law, has been pragmatically framed in the context of Delaware corporate law. Delaware is the state where the majority of the largest United States companies are incorporated,⁵ and its corporate law often serves as the authority that other states look to when developing their own statutory and case law.⁶ Therefore, the primary examples are from Delaware, but the thinking is meant to be global.

This Article proceeds as follows: Part I briefly describes HFA. Part II describes how HFA operates as a corrective mechanism in corporate governance. This description closely parallels how potential acquirers seek control to correct managerial inefficiencies. This Part closes by providing a theory of shareholder activism that explains how HFA creates value for shareholders and enhances the performance of target companies. argument has as its foundation Henry Manne's remarkable article, "Mergers and the Market for Corporate Control."7 Manne argued that control of a public company was a valuable asset in and of itself if used to correct managerial inefficiencies.8 Shareholder activism, such as HFA, can be thought of in the same manner, "a valuable asset in and of itself if the purpose of such activism is to correct such inefficiencies." Part III discusses how the judiciary's traditional approach to the review of Board decisions—strong deference to Board authority—could potentially be used to reduce the incentives of hedge funds to act as activists. The judiciary could do this by being over-permissive in allowing Boards to stifle the activities of activist hedge funds. The judiciary's strong deference to Board authority derives from a strong respect for statutory corporate law's private ordering of authority and its understanding that the Board and its management team, not the courts, are the business experts. discusses the *Unocal* test as a permissive standard of review and how the application of the test in *Third Point* conforms to the thesis. Part V concludes with general recommendations on how the courts should handle

⁵ See Lewis S. Black, Jr., Why Corporations Choose Delaware, Del Dept. of State Div. Of Corp., 1,1 (2007), http://corp.delaware.gov/whycorporations_web.pdf (stating that Delaware is the "favored state of incorporation for U.S. businesses"). According to the State of Delaware website, Delaware is the legal home to "[m]ore than 50% of all publicly-traded companies in the United States including 64% of the Fortune 500." State of Delaware, About Agency, http://corp.delaware.gov/aboutagency.shtml (last visited Nov. 3, 2015).

⁶ See Nadelle Grossman, Director Compliance with Elusive Fiduciary Duties in a Climate of Corporate Governance Reform, 12 FORDHAM J. CORP. & FIN. L. 393, 397 (2007).

⁷ Henry G. Manne, Mergers and the Market for Corporate Control, 73 J. Pol. Econ. 110 (1965).

⁸ Id at 112

⁹ Bernard S. Sharfman, A Theory of Shareholder Activism and its Place in Corporate Law, 82 TENN. L. REV. 791, 794 (2015) [hereinafter Sharfman, A Theory of Shareholder Activism].

the review of Board actions meant to mute the activities of activist hedge funds.

I. WHAT IS HEDGE FUND ACTIVISM

Shareholder activism refers to "any action(s) of any shareholder or shareholder group with the purpose of bringing about change within a public company without trying to gain control." Therefore, shareholder activism exists in a "market for corporate influence," not corporate control. Shareholder activism comes in many different forms and HFA is one of them. HFA is a type of performance-driven activism. Performance-driven activism focuses on advocating for significant changes in corporate strategy to increase the market price of a company's stock. It may also act as a bridge between the market for corporate influence and the market for corporate control by encouraging firms to correct inefficiencies through a friendly merger.

HFA typically begins with an unregulated investment fund (the hedge fund) accumulating a significant amount of a public company's stock, usually around 5% to 10% of the shares outstanding.¹⁴ The activist hedge fund makes purchases based on its determination that the target company is suffering from significant *managerial inefficiencies*. It believes that if management adopts its recommended strategies then the value of the company's common stock would significantly increase and the company's performance would improve.¹⁵

¹⁰ Paul Rose & Bernard S. Sharfman, Shareholder Activism as a Corrective Mechanism in Corporate Governance, 2014 BYU L. REV. 1014, 1017 (2014). Professor Andreas Jansson describes shareholder activism as outside shareholders who "influence corporate insiders . . . by voicing their opinions in order to affect corporate behavior." Andreas Jansson, No Exit!: The Logic of Defensive Shareholder Activism, 10 CORP. BOARD: ROLE, DUTIES & COMPOSITION 16, 16 (2014). Professors Stuart Gillian and Laura Starks note: "Shareholder activists are often viewed as investors who, dissatisfied with some aspect of a company's management or operations, try to bring about change within the company without a change in control." Stuart L. Gillan & Laura T. Starks, The Evolution of Shareholder Activism in the United States, 19 J. APPLIED CORP. FIN. 55, 55 (2007).

¹¹ Brian R. Cheffins & John Armour, *The Past, Present, and Future of Shareholder Activism by Hedge Funds*, 37 J. CORP. L. 51, 58 (2011). As has been pointed out by Henry Manne in an email exchange with this author, the development of the market for corporate influence has no doubt been helped by federal securities and state corporate laws that have greatly inhibited the volume of hostile takeover transactions. E-mail from Henry G. Manne, Professor Emeritus of Law, Geo. Mason Univ., to Bernard S. Sharfman, Assistant Professor of Law, Case W. Univ. Sch. L. (Sept. 11, 2013) (on file with author).

¹² Hedge fund activism is more formally referred to as offensive shareholder activism. *See* Cheffins & Armour, *supra* note 11, at 56–57.

Rose & Sharfman, *supra* note 10, at 1018.

¹⁴ See Cheffins & Armour, supra note 11, at 56.

¹⁵ Id.

In order for an activist hedge fund to maximize returns, it cannot hold the target company's stock for a long period of time.¹⁶ Once it becomes apparent that it has either succeeded or failed in its mission to correct managerial inefficiencies, it must move on to the next target in order to maximize its number of interventions and thus the profits of its own investors.¹⁷ It is not possible for investors like Warren Buffet and his company, Berkshire Hathaway, to participate in such corrective activism precisely because they have much longer holding periods.¹⁸ Therefore, such long-term investors must yield this market to activist hedge funds.¹⁹

Activist hedge funds can be categorized as a very special subset of what Zohar Goshen and Gideon Parchomovsky call "information traders." These traders participate in the financial markets based on non-public research and analysis and "are willing and able to devote resources to gathering and analyzing information as a basis for their investment decisions." They "detect discrepancies between value and price based on the information they possess . . . then trade to capture the value of their informational advantage." Information traders move security prices toward their fundamental values and are in essence, "the agents who render markets efficient." ²³

The most common type of information trader is the *value investor*.²⁴ Value investors devote whatever limited time, resources, and skill they have to valuation, not to the process of trying to correct managerial inefficiencies through an attempt to acquire control or hedge fund activism.²⁵ Value investors incorporate information on *managerial inefficiencies* into the

Rose & Sharfman, *supra* note 10, at 1046. *See also* Alon Brav, Wei Jiang, Frank Partnoy & Randall Thomas, *Hedge Fund Activism, Corporate Governance, and Firm Performance*, 63 J. FIN. 1729, 1732 (2008) [hereinafter Brav, et al. *Hedge Fund Activism, Corporate Governance*].

¹⁷ Rose & Sharfman, *supra* note 10, at 1046.

¹⁸ *Id*.

¹⁹ *Id*.

Zohar Goshen & Gideon Parchomovsky, *The Essential Role of Securities Regulation*, 55 DUKE L.J. 711, 721–22 (2006). Other information traders include acquirers in the market for corporate control, money managers, and even market professionals who specialize in providing recommendations to investors based on non-public research and analysis in exchange for compensation. *Id.* at 723-24. Non-information traders include "insiders," such as directors and executive management who have access to non-public information but are significantly restricted in the trading of that information; "liquidity traders," who invest in passive, index funds; "noise traders," who invest based on fads, rumors or old information; and "market makers," "professionals who facilitate trading and maintain a market for securities by offering to buy or sell securities on a regular basis." *Id.* at 722-26.

²¹ *Id.* at 723.

²² *Id.* at 726.

²³ *Id.* at 719.

Rose & Sharfman, *supra* note 10, at 1033.

²⁵ *Id*.

price of a company's stock by *voting with their feet*,²⁶—selling their shares when they perceive managerial inefficiencies—rather than becoming proactive in the corporate governance of any particular firm.²⁷

By contrast, being an activist hedge fund means not just identifying managerial inefficiencies, but also raising large amounts of capital in order to make a significant investment in the company. It also requires possessing both the expertise necessary to make the recommended changes that will correct the managerial inefficiencies and having the time and financial resources available to vigorously advocate for change.²⁸ Moreover, being an activist hedge fund may mean giving up the benefits of portfolio diversification as the acquisition becomes an overweighed investment in the information trader's portfolio; exposing the activist hedge fund to non-systematic risk.²⁹

II. HOW HEDGE FUND ACTIVISM WORKS AS A CORRECTIVE MECHANISM

Numerous empirical studies demonstrate that HFA increases the wealth of shareholders and improves the performance of the public companies it targets.³⁰ These studies support the argument that activist

²⁶ According to Professors Armen Alchian and Harold Demsetz in their seminal article, *Production, Information Costs, and Economic Organization*, "Any shareholder can remove his wealth from control by those with whom he has differences of opinion. Rather than try to control the decisions of the management, which is harder to do with many stockholders than with only a few, unrestricted salability provides a more acceptable escape to each stockholder from continued policies with which he disagrees." Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 AM. ECON. REV. 777, 788 (1972).

²⁷ Sharfman, A Theory of Shareholder Activism, supra note 9, at 805.

²⁸ *Id*.

²⁹ *Id.* at 806.

³⁰ See Brav, et al. Hedge Fund Activism, Corporate Governance, supra note 16 at 1731. See also Nicole M. Boyson & Robert M. Mooradian, Corporate Governance and Hedge Fund Activism, 14 REV. DERIVATIVES RES. 169, 175-78, 200 (2011) (examining data from 1994-2005 and finding that hedge fund activism improved by short and long-term performance of companies); Christopher P. Clifford, Value Creation or Destruction? Hedge Funds as Shareholder Activists, 14 J. CORP. FIN. 323, 324 (2008) (finding that in a control group containing hedge funds that filed Schedule 13Gs, "firms targeted by hedge funds for active purposes earn larger, positive [returns] than firms targeted by hedge funds for passive purposes"); Robin M. Greenwood & Michael Schor, Investor Activism and Takeovers, 92 J. FIN. ECON. 362, 374 (2009) (finding that "activists are most successful at creating value when they are able to [force] a change in control"); Dionysia Katelouzou, Myths and Realities of Hedge Fund Activism: Some Empirical Evidence, 7 VA. L. & BUS. REV. 459, 479 (2013) (examining empirical results consistent with these studies but focusing on hedge fund activity outside the United States); April Klein & Emanuel Zur, Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors, 64 J. FIN. 187, 213, 217-18 (2009) (focusing on activist campaigns by both hedge funds and other types of entrepreneurial activists, the study found that both types of campaigns produced abnormal returns for target shareholders); Alon Brav et al., Shareholder Power and Corporate Innovation: Evidence from Hedge Fund Activism 26-28 (Ind. Univ., Kelly Sch. of Bus., Working Paper No. 2014-05, 2014)

hedge funds are being utilized as *corrective mechanisms* in the governance of public companies.³¹ According to Sharfman, "a corrective mechanism is defined as a part [or potential part] of a public company, other than the [current] Board or executive management, which may have, from time to time, superior decision-making skills in the making of major corporate decisions."³²

But how does HFA actually work as a corrective mechanism? Since the activist hedge fund is a participant in the stock market and is presumed to be targeting the correction of managerial inefficiencies, it should not be surprising that this Article finds guidance in Henry Manne's seminal article, *Mergers and the Market for Corporate Control*.³³

(finding a link between improvements in innovation efficiency and hedge fund activism at firms with a diverse set of patents as a result of the activism leading to a more targeted approach to innovation); C.N.V. Krishnan, Frank Partnoy & Randall S. Thomas, *The Second Wave of Hedge Fund Activism: The Importance of Reputation, Clout, and Expertise* 4, 34 (Vand. L. Sch., Law & Economics Working Paper No. 15-9, 2015) (discussing that hedge fund activism continues to generate positive announcement–period abnormal stock returns using a dataset collected from 2008 through mid-2014; Marco Becht, Julian R. Franks, Jeremy Grant, & Hannes F. Wagner, *The Returns to Hedge Fund Activism: An International Study*, (Eur. Corp. Governance Inst. Working Paper No. 402/2014 2014); Shane Goodwin, *Myopic Investor Myth Debunked: The Long-Term Efficacy of Shareholder Advocacy in the Boardroom* 11–13 (June 13, 2014) (unpublished working paper)

(http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2450214) (reporting excess returns for activist hedge funds who gain board representation); Nicole M. Boyson, Linlin Ma, & Robert M. Mooradian, Serial Activists 31 (Ne. U. D'Amore-McKim School of Business Research Paper No. 2727371, 2016) (using data from 2001-2013 to demonstrate that target performance is best when experienced hedge fund activists are involved). But see, K.J. Martijn Cremers, Erasmo Giambona, Simone M Sepe, & Ye Wang, Hedge Fund Activism and Long-Term Firm Value (November 19, 2015) (unpublished manuscript) (http://ssrn.com/abstract=2693231); Yvan Allaire & François Dauphin, The Game of 'Activist' Hedge Funds: Cui Bono? (August 31, 2015) (unpublished working paper) (https://igopp.org/en/the-game-of-activist-hedge-funds-cui-bono/). For a sharp critique of the Cremers, Giambona Sepe and Wang study, see Lucian Bebchuk, Alon Brav, Wei Jiang, & Thomas Keusch, The Long-term Effects of Hedge Fund Activism: A Reply to Cremers, Giambona, Sepe, and Wang (Dec. 10, 2015) (unpublished manuscript) (https://corpgov.law.harvard.edu/2015/12/10/the-long-term-effects-of-hedge-fund-activism-a-reply-to-cremers-giambona-sepe-and-wang/).

- Rose & Sharfman, *supra* note 10, at 1037–38.
- ³² See Sharfman, A Theory of Shareholder Activism, supra note 9, at 792-93. The inserted language in brackets changes the original definition to include potential acquirers who want to replace current Board members so as to implement new strategies. The definition is based on Kenneth Arrow's observation that "from time to time it may be more efficient to allow for a corrective mechanism to exist in a large organization. That is, the central authority recognizes that a part of the organization outside itself may have superior information or decision-making skills." Rose & Sharfman, supra note 10, at 1015 (citing KENNETH J. ARROW, THE LIMITS OF ORGANIZATION 74-75 (Fels Center of Government 1974)).
 - 33 See Manne, supra note 7.

A. The Potential Acquirer as a Corrective Mechanism in Corporate Governance

In *Mergers and the Market for Corporate Control*, Henry Manne argued that "the control of corporations may constitute a valuable asset" in and of itself, an asset that "exists independent of any interest in either economies of scale or monopoly profits," if the acquirer takes control with the expectation of correcting managerial inefficiencies. ³⁴ Manne's theory is based on the simple but brilliant premise that there is "a high positive correlation between corporate managerial efficiency and the market price of shares of that company." ³⁵ Such a premise means that the price of a public company's stock will in part reflect managerial performance.

Critical to this theory is the existence of a liquid stock market where potential acquirers could assess the price of the stock versus what the price could be with better management.³⁶ Manne provides the following description of how the market for corporate control operates:

Briefly, the market for corporate control in our system operates in the following manner: if an existing corporation with publicly traded shares is poorly managed, holders of those shares will respond by selling. This will drive the price down to the point indicated by the quality of management which the corporation is receiving. As the price of securities of any corporation is thought to be low relative to the price that would be generated by more efficient managers, the stage is set for the critical functioning of the market for corporate control. Outsiders . . . will respond to the opportunity to make substantial capital gains (not necessarily in the tax sense) by buying control, managing the company efficiently, and then perhaps disposing of the shares. It is not necessary that they remain permanently to manage the business.³⁷

Another critical component in the successful operation of Manne's market for corporate control is the presence of value investors. A low share price³⁸ resulting from a significant number of value investors "voting with their

The lower the stock price, relative to what it could be with more efficient management, the more attractive the takeover becomes to those who believe that they can manage the company more efficiently. And the potential return from the successful takeover and revitalization of poorly run company can be enormous.

Manne, supra note 7, at 113.

³⁴ *Id.* at 112.

³⁵ *Id.* As Fred McChesney has pointed out, this premise anticipated the "efficient market hypothesis." Fred S. McChesney, *Manne, Mergers, and the Market for Corporate Control*, 50 CASE W. RES. L. REV. 245, 251 (1999) ("Here, clearly, Manne was adumbrating what is now called the "efficient market hypothesis," generally acknowledged as one of the most important ideas in modern finance.").

³⁶ Manne, *supra* note 7, at 113 ("Share price, or that part reflecting managerial efficiency, also measures the potential capital gain inherent in the corporate stock.").

³⁷ Henry G. Manne, *Cash Tender Offers for Shares – A Reply to Chairman Cohen*, 1967 DUKE L.J. 231, 236 (1967) (citations omitted).

³⁸ According to Manne:

feet"³⁹ provides an opportunity for an information trader who is willing and able to make the investment necessary in acquiring control and has the required expertise to correct the managerial inefficiencies that exists. ⁴⁰ Once these inefficiencies have been corrected, the information trader, whether a friendly or hostile acquirer, can then sell its investment for a large profit if it so desires. ⁴¹ As a result, the potential acquirer, by targeting its activities to correcting managerial inefficiencies, is also acting as a corrective mechanism in corporate governance.

B. The Activist Hedge Fund as a Corrective Mechanism in Corporate Governance

An activist hedge fund works in a similar manner to the potential acquirer who is seeking to correct managerial inefficiencies.⁴² The difference is that the activist hedge fund attempts to correct inefficiencies through its influence, not its control of the company.⁴³ It utilizes value investors who are voting with their feet as an opportunity to acquire a significant but not controlling share in a company at a relatively low price with the expectation that the inefficiencies will eventually be corrected through its efforts and the price will rise to reflect these enhanced efficiencies.⁴⁴ Once these enhanced efficiencies have been fully reflected in the stock price, the activist hedge fund can then sell its investment for a large profit if it so desires.⁴⁵ In essence, HFA provides a corrective function similar to, but with less investment and more advocacy than, what is found in the market for corporate control.⁴⁶

Moreover, the similarities between potential acquirers and activist hedge funds as corrective mechanisms are even more striking when one looks closer at the empirical results and sees that the wealth enhancement created by HFA has been primarily a result of recommendations that have led to "the sale of the company or changes in business strategy, such as refocusing and spinning-off noncore assets." The results suggest that the

³⁹ For example, in *Jones v. Harris Associates L.P.*, Judge Easterbrook noted how investors will simply sell their investments if they are not happy with them: "The trustees (and in the end investors, who vote with their feet and dollars), rather than a judge or jury, determine how much advisory services are worth." 527 F.3d 627, 632 (7th Cir. 2008).

Manne, supra note 7, at 112-13.

⁴¹ *Id.* at 113.

⁴² Sharfman, A Theory of Shareholder Activism, supra note 9, at 805-07.

⁴³ *Id.*

⁴⁴ *Id*.

⁴⁵ *Id*.

⁴⁶ Id.

⁴⁷ Brav et al., *Hedge Fund Activism, Corporate* Governance, *supra* note 16, at 1731. *See* Rose & Sharfman, *supra* note 10, at 1036, and accompanying text. *See also* Greenwood & Schor, *supra* note

activist hedge fund is utilizing its influence to convince a reluctant Board to seek a friendly merger in order to correct the company's managerial inefficiencies, a very desirable outcome in Manne's theory of corporate control.

Therefore, a theory of shareholder activism can be stated as a *corollary* to Manne's theory of corporate control: "In the context of public companies, shareholder activism *may* constitute a valuable asset in and of itself if the goal of such activism is to enhance managerial efficiency." Such an argument utilizes Manne's premise that there is "a high positive correlation between corporate managerial efficiency and the market price of shares of that company" and assumes that the activist holds enough shares in the company to earn a large enough return on the expected increase in the stock price to cover the costs of its activism. ⁵⁰

This theory of shareholder activism purposely tries to mimic the language used in Manne's theory of corporate control. When stating his theory, Manne was trying to make the point that not all takeovers of competitors (horizontal mergers) were bad.⁵¹ That is, those acquirers that were targeting the correction of managerial inefficiencies enhanced shareholder value and improved the performance of target companies. In the same vein the theory of shareholder activism is trying to make the point that not all shareholder activism is bad. More specifically, there is one type of shareholder activism that has been found to be value enhancing and that is HFA.

C. HFA and Board Independence

Value investors, by voting with their feet, provide negative signals to the stock market on how well a company is doing.⁵² These negative signals, in the form of a falling stock price, are also being sent to the target Board.⁵³ Perhaps the stock price fall is not a reflection of managerial competence, but simply is a result of business conditions that cannot be controlled.⁵⁴ Here is where activist hedge funds can help refine the negative signals

^{30,} at 363 (finding that abnormal positive returns only existed when the activism was associated with the ultimate sale of the target to a third party); Nicole M. Boyson, Nickolay Gantchev, & Anil Shivdasani, *Activism Mergers* 10-11 (Ne. U. D'Amore-McKim School of Business Research Paper No. 2677416, 2016).

⁴⁸ Sharfman, A Theory of Shareholder Activism, supra note 9, at 804.

⁴⁹ Manne, *supra* note 7, at 112.

 $^{^{50}}$ Sharfman, Activist Hedge Funds, supra note 1, at 831.

⁵¹ Manne, *supra* note 7, at 110–11.

⁵² Sharfman, Activist Hedge Funds, supra note 1, at 842-43.

⁵³ *Id*.

⁵⁴ *Id*.

being sent by value investors.⁵⁵ The actions of the activist hedge fund provide additional and confirming signals to the Board and other stock market participants that managerial inefficiencies may exist at the company.⁵⁶ They not only identify alleged inefficiencies but they also provide the Board with recommendations on how those inefficiencies can be corrected.⁵⁷

Board independence can significantly enhance the value of the signals provided by the activist hedge fund. This argument can be summarized as follows: "An activist hedge fund can create long-term value at a public company if the Board has enough independence to act as an impartial arbitrator deciding between the advices provided by executive management and the activist hedge fund." The role of executive management is critical to understanding this argument as corporate law authorizes the Board to delegate the bulk of its decision-making authority to executive management. Executive management is a locus of authority created by delegation separate from, but under the control of, the Board. Not only does executive management run the company on a day-to-day basis, it also provides the Board with recommendations on what investment projects and strategies the company should proceed with and then implements them with Board approval. The management expertise created by this delegation cannot be understated.

Independence allows the Board to be receptive to stock market signals⁶³ and to recognize other parts of the organization, if only on a temporary basis, as competing loci of authority with executive management when they are perceived to add value to the company's decision-making.⁶⁴ According to Kenneth Arrow, decision-making "[e]rror is unnecessary when the information is available somewhere in the organization but not available to or not used by the authority."⁶⁵ In the context of the public company, the activist hedge fund may serve as that temporary competing locus of authority. With an adequate level of independence, a Board can arbitrate between the two loci of authority and then determine which of the following paths it should pursue: "the one recommended by executive

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<sup>55</sup> Id.
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⁵⁶ Sharfman, Activist Hedge Funds, supra note 1, at 842-43.

^{57 &}lt;sub>Id</sub>

⁵⁸ *Id.* at 843-46.

⁵⁹ *Id*. at 822.

⁶⁰ DEL. CODE ANN. tit. 8, § 142(a) (2010).

⁶¹ Id.

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⁶³ See Jeffrey N. Gordon, The Rise of Independent Directors in the United States, 1950–2005: Of Shareholder Value and Stock Market Prices, 59 STAN. L. REV. 1465, 1563 (2007).

⁶⁴ Sharfman, Activist Hedge Funds, supra note 1, 843-46.

⁶⁵ ARROW, supra note 32, at 74.

management, the one recommended by the activist hedge fund, or perhaps a combination of both."66

III. HFA'S POTENTIAL PROBLEM WITH CORPORATE LAW

Empirical studies tell us that HFA can act as a corrective mechanism in corporate governance, enhancing shareholder value and improving the operating performance of the target company.⁶⁷ However, the value of this corrective mechanism may be lost if it is ignored by the Board. That is why having an adequate level of Board independence is critical to maximizing the probability that the recommendations of the activist hedge fund will be critically and impartially considered by the Board. But being ignored by the Board is not the only way this value can be lost. Another way is if corporate law reduces the incentives of a hedge fund to participate in the stock market as an activist, similar to the way the courts dealt with hostile bidders and their use of tender offers. This Part discusses how the judiciary's traditional approach to the review of Board decisions, giving strong deference to Board authority, could potentially be used to reduce the incentives of hedge funds to act as activists. The judiciary can do this by being over-permissive in allowing Boards to stifle the activities of activist hedge funds. The judiciary's strong deference to Board authority derives from a strong respect for statutory corporate law's private ordering of authority and its understanding that the Board and its management team, not the courts, are the business experts.

A. Statutory Corporate Law's Private Ordering

Corporate law primarily provides default, not mandatory, rules. This allows for private ordering of corporate authority through a process of creating, modifying and repealing charter and bylaw amendments.⁶⁸ Private ordering is considered efficient because it allows for the implementation of market-driven corporate governance arrangements.⁶⁹ That is, it "allows the

⁶⁶ Sharfman, Activist Hedge Funds, supra note 1, at 847.

⁶⁷ See supra text accompanying note 30.

⁶⁸ Jill E. Fisch, *Leave it to Delaware: Why Congress Should Stay out of Corporate Governance*, 37 DEL. J. CORP. L. 731, 743 n.80 (2013).

⁶⁹ According to Professor Jonathan Macey:

[[]B]ecause informal norms generate outcomes that are generally welfare-enhancing, while law at best generates outcomes that are mixed (and tend strongly towards the welfare-reducing), informal norms should come with a strong presumption of legitimacy. Formal legal rules are likely to be inefficient at best and amorally redistributive at worst. Thus, under a wide range of circumstances, such as when society is interested in maximizing utilitarian considerations, and when society is interested in resolving standard legal disputes

internal affairs of each corporation to be tailored to its own attributes and qualities, including its personnel, culture, maturity as a business, and governance practices."⁷⁰ In effect, "observed governance choices are the result of value-maximizing contracts between shareholders and management."⁷¹

1. DGCL §141(a)

For purposes of this Article, the most critical default rule is DGCL §141(a).⁷² On its face, or perhaps more precisely because of its vagueness, this statutory rule can potentially be interpreted as providing the Board with unlimited managerial authority. This default rule is so universally implemented in its unmodified form that it most likely could have been written as a mandatory rule without significantly restricting the contracting parties' abilities to enter into private ordering.⁷³ That is, if there is truly a bargaining process that goes on between contracting parties in a public company, then there seems to be overwhelming support for allowing the Board to retain its default authority.

Despite the inhibiting factor that the Board is given sole authority to initiate charter amendments that would limit its own authority, if the contracting parties wanted certain shareholders, such as activist hedge funds, to share the Board's default authority under DGCL §141(a), then you would expect to see at least some public companies having such charter provisions. However, public companies never modify this default rule in any substantive way.⁷⁴ This lack of modification needs to be acknowledged as the first and most fundamental step in such a company's private ordering process.

Recognition by the contracting parties that the Board has superior decision making capabilities, based primarily on superior information

within groups, lawmakers are unlikely to improve upon the customary rules the group develops through voluntary, private interaction.

Jonathan R. Macey, *Public and Private Ordering and the Production of Legitimate and Illegitimate Legal Rules*, 82 CORNELL L. REV. 1123, 1140 (1997).

Troy A. Paredes, Comm'r, U.S. Sec. & Exch. Comm'n, Statement at Open Meeting to Propose Amendments Regarding Facilitating Shareholder Director Nominations (May 20, 2009), www.sec.gov/news/speech/2009/spch052009tap.htm.

⁷¹ David F. Larcker, Gaizka Ormazabal & Daniel J. Taylor, The Market Reaction to Corporate Governance Regulation, 101 J. FIN. ECON. 431, 431 (2011).

⁷² DEL. CODE ANN. tit. 8, §141(a) (2010).

⁷³ Bernard S. Black, Is Corporate Law Trivial: A Political and Economic Analysis, 84 Nw. U. L. REV. 542, 551 (1990).

⁷⁴ *Id. See also*, Aronson v. Lewis, 473 A.2d 805, 811 (Del. 1984) ("A cardinal precept of the General Corporation Law of the State of Delaware is that directors, rather than shareholders, manage the business and affairs of the corporation."), *overruled on other grounds by* Brehm v. Eisner, 746 A.2d 244, 254 (Del. 2000).

including confidential information, is the rationale that explains why the bargaining process always allows DGCL §141(a) to be incorporated without substantive modification into a public company's charter. The parties recognize that a centralized, hierarchical authority is necessary for the successful management of a public company that can become extremely large in size.⁷⁵ It also explains why the Board is given exclusive authority to initiate charter amendments, the process by which substantive authority is distributed in a public company.

Importantly, it also explains why the Board, under DGCL 142(a), is given the authority to create executive management positions and select the individuals to fill those positions. The result is that the default rules of statutory corporate law provide for only two loci of authority, the Board and by delegation, executive management. There is no room for an activist hedge fund to function as a third locus of authority without a substantive modification of these default rules, a modification that does not happen. Therefore, the courts will legitimately be suspicious of any sign that activist hedge funds are trying to usurp this allocation of corporate authority, an allocation that has been sanctioned by statutory corporate law. Thus, the activist hedge fund, without the legal authority to make corporate decisions, is legally confined to the market for corporate influence.

2. The Objective of Corporate Authority

Even though statutory corporate law is silent on the topic and courts have been reluctant to opine,⁷⁷ it is easy to make the argument that the default objective of authority under corporate law is shareholder wealth maximization. Under a nexus of contracts understanding of the firm,

⁷⁵ ROBERT CHARLES CLARK, CORPORATE LAW, app. at 801–16 (1986) (arguing that "facilitation of cooperation" allows for efficiently completing large tasks). According to Kenneth Arrow, information scattered over a large organization must be both filtered and transmitted to a centralized authority in order for a large organization to make informed decisions and minimize error in decision making. ARROW, *supra* note 32, at 68-70 (1974). Alan Alchian and Harold Demsetz argued that a centralized authority was necessary to eliminate the problems associated with having a large number of shareholders:

If every stock owner participated in each decision in a corporation, not only would large bureaucratic costs be incurred, but many would shirk the task of becoming well informed on the issue to be decided, since the losses associated with unexpectedly bad decisions will be borne in large part by the many other corporate shareholders. More effective control of corporate activity is achieved for most purposes by transferring decision authority to a smaller group, whose main function is to negotiate with and manage (renegotiate with) the other inputs of the team.

Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 AM. ECON. REV. 777, 788 (1972).

⁷⁶ DEL. CODE ANN. tit. 8 §142(a) (2015).

⁷⁷ For a summary of cases where the Courts have not been reluctant to opine, *see* George A. Mocsary, *Freedom of Corporate Purpose*, 2016 BYU L. REV. 1319 (2017)

shareholders are the sole claimants to the residual cash flows generated by the firm, since other parties transacting with the corporation can adequately protect themselves by contract.⁷⁸ That is, they are the parties to the corporate contract that have the greatest risk of ending up with nothing as a result of their dealings with the corporation. The Board may have ultimate authority to act and make decisions under the default rules of corporate law, but that authority is only given by shareholders if the Board acts to enhance shareholder value. Moreover, a Board and executive management targeting shareholder wealth maximization means that all other parties that have contracted with the corporation must be paid off prior to the shareholders receiving a residual, if any.⁷⁹ Therefore, these other contracting parties should be supportive of shareholder wealth maximization as the objective of corporate authority. As stated by Henry Manne, the result is an example of "pure positive economics" 80 and should be accepted as such. In sum, this objective is what all parties to the corporate contract agree to and what the courts should be expected to enforce.81

B. HFA and Judicial Review

While the default rules of statutory corporate law provide the framework for the private ordering of corporate authority, the courts, through statutory interpretation, fill in the terms of this private ordering that were not resolved ex ante.⁸² More specifically, this process allows us to understand what an unmodified DGCL §141(a) means under fact patterns that the parties to the corporate contract did not contemplate prior to corporate formation.

This would include communities who provide tax credits and abatements to companies who agree to remain or relocate to their geographic area, vendors who customize their production to provide specialized inputs, and researchers who invest many years of specialized effort and skill as employees, three examples of other parties that transact with public companies via contract. Under a team production approach to corporate governance, an approach that is not taken here, these three examples would represent persons or entities that make specialized investments in the public company that have little or no value outside the company. See Margaret M. Blair & Lynn A. Stout, A Team Production Theory of Corporate Law, 85 VA. L. REV. 247, 272 (1999). Like equity investors, these stakeholders have made firm-specific investments and therefore should have equivalent standing as claimants on the residual cash flows generated by the firm. Id. at 274–76.

⁷⁹ Frank H. Easterbrook & Daniel R. Fischel, The Economic Structure of Corporate Law 38 (1991) ("[M]aximizing profits for equity investors assists the other "constituencies" automatically.").

⁸⁰ E-mail from Henry G. Manne, Professor Emeritus of Law, Geo. Mason Univ., to Bernard S. Sharfman (December 29, 2012) (on file with author).

⁸¹ For a good discussion of shareholder wealth maximization as the norm of corporate governance, *see* Mocsary, *supra* note 77, Part II.

⁸² EASTERBROOK & FISCHEL, *supra* note 79, at 35.

As already noted, on its face, an unmodified DGCL §141(a) provides a Board with potentially unlimited authority to manage the company. While the application of equitable principles has led to the creation of fiduciary duties to control the wrongful use of Board authority under DGCL §141(a), it still allows standards of review, such as the business judgment rule ("a presumption that in making a business decision, the directors of a corporation acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company")⁸³ and, to a lesser extent the *Unocal* test, which provide significant deference to Board authority.

If the courts accept shareholder wealth maximization as the objective of corporate authority, then it is not hard to imagine that courts equate this objective with deference to Board authority. Judges recognize that the Board is the locus of authority in a company that is in the best position to make corporate decisions that maximize shareholder wealth. They also recognize that it is not their role to second-guess these decisions unless those decisions are tainted with interestedness or lack of independence or with a breach of fiduciary duties.⁸⁴ Even though they definitely have the brains, judges recognize that they lack information, decision-making skills, expertise, and interests (i.e., lacking a stake in the company) relative to corporate management.⁸⁵ As stated by the Michigan Supreme Court in the famous case of *Dodge v. Ford Motor Co.*,⁸⁶ "[J]udges are not business experts." Moreover, the whole process of decision making that allows companies to increase shareholder wealth is outside the realm of what judges can provide:

[D]etermining whether a business decision is shareholder wealth-maximizing is not just about plugging in a formula and calculating the result, which any computer or calculator can do. Rather, it refers to the specific formula that will be utilized by management to determine if a particular decision maximizes shareholder wealth. One can think of this in terms of a mathematical formula where the decision maker is given the responsibility of choosing the variables and estimating the coefficients of those variables. This requires many sources of knowledge and expertise that chancellors and judges lack, including experience in the particular business that the company may be in, product and company knowledge, management skills, financial skills, creative and analytical thinking pertinent to a company's business, confidential information, and so on. For example, who has the knowledge and expertise to decide whether a distinctive corporate culture enhances or detracts from

⁸³ Smith v. Van Gorkom, 488 A.2d 858, 872 (Del. 1985) (citing Aronson v. Lewis, 473 A.2d 805, 812 (1984)).

⁸⁴ Bernard S. Sharfman, *Shareholder Wealth Maximization and its Implementation under Corporate Law*, 66 FLA. L. REV. 389, 406-09 (2014).

⁸⁵ Id

⁸⁶ Dodge v. Ford Motor Co., 170 N.W. 668, 684 (Mich. 1919).

⁸⁷ Sharfman, *supra* note 84, at 407 (citing *Dodge*, 170 N.W. at 684).

shareholder value? The clear answer is that the board and its executive management are the proper locus of authority for making this decision. ⁸⁸

As long as the courts do not find taint or a breach in a Board's fiduciary duties, they typically do not want to get involved in that determination.⁸⁹ Finally, when the courts do get involved, they modestly aspire to identify a fair result,⁹⁰ not the one that maximizes wealth.⁹¹

Indeed, this presumption that the Board provides the corporation with superior decision-making is endorsed by the courts through its explanation of why it applies the business judgment rule:

The "business judgment" rule is a judicial creation that presumes propriety, under certain circumstances, in a board's decision. Viewed defensively, it does not create authority. In this sense the "business judgment" rule is not relevant in corporate decision making until after a decision is made. It is generally used as a defense to an attack on the decision's soundness. The board's managerial decision making power, however, comes from § 141(a). The judicial creation and legislative grant are related because the "business judgment" rule evolved to give recognition and deference to directors' business expertise when exercising their managerial power under § 141(a).

According to Easterbrook and Fischel, "the application of the business judgment rule contributes to the efficient management that shareholders desire. There is no reason to think that courts generally could improve the performance of managers. Courts lack the experience and information necessary to make business decisions." What is desired by the courts in terms of corporate authority can be summarized in the following statement by Stephen Bainbridge: the "[p]reservation of managerial discretion should always be the null hypothesis."

In sum, when a court is asked to review the actions of a Board in response to the activities of activist hedge funds, the court will have to decide whether the actions of the Board were tainted or breached its fiduciary duties. It will do so knowing that strong deference to Board

⁸⁸ Id. at 408.

⁸⁹ *Id.* at 409-11.

⁹⁰ See Smith v. Van Gorkom, 488 A.2d 858, 893 (Del. 1985) (case remanded to Chancery Court for a finding of fair value of shares held by the minority shareholders after determination that the defendant Board committed gross negligence); Weinberger v. UOP, Inc., 457 A.2d 701, 710 (Del. 1983) (shifting the burden of proof to directors "to demonstrate their utmost good faith and the most scrupulous inherent fairness of the bargain" when a breach of the duty of loyalty has occurred).

⁹¹ See supra text accompanying note 90.

⁹² Zapata Corp. v. Maldonado, 430 A.2d 779, 782 (Del. 1981).

Frank H. Easterbrook & Daniel R. Fischel, *The Proper Role of a Target's Management in Responding to a Tender Offer*, 94 HARVARD L. REV. 1161, 1196 (1981) [hereinafter Easterbrook & Fischel, *Responding to a Tender Offer*].

⁹⁴ Stephen M. Bainbridge, The Business Judgment Rule as Abstention Doctrine, 57 VAND. L. REV. 83, 109 (2004).

authority has traditionally been the judiciary's best approach to making sure that corporate decisions are wealth maximizing. Most importantly, it will not want to upset the allocation of authority that has already occurred under corporate law's private ordering scheme. Therefore, it should be expected that a court will continue to apply fiduciary duties in its traditional gentle way, making it very difficult for plaintiffs to show to the courts' satisfaction that a breach has occurred.⁹⁵

C. The Tension Between HFA and Corporate Law

This approach to judicial review, giving strong deference to Board authority, whether in the application of the business judgment rule or the permissive *Unocal* test, is where the tension arises between HFA and corporate law. Tension results when, in exceptional fact patterns, an effective corrective mechanism such as HFA challenges the courts' deferential approach. That is, when strong theoretical arguments and strong empirical evidence suggest that strong deference to Board authority may not be optimal in judicial review. This tension was evident in the recent case of *Third Point LLC v. Ruprecht*.⁹⁶

IV. THE UNOCAL TEST

In the recent case of *Third Point*, the *Unocal* test was used to review the Board's use of a discriminatory poison pill meant to keep an activist hedge fund from winning a proxy contest. As discussed below, the court's review in *Third Point* is consistent with the thesis that the courts will be over-permissive in allowing Boards to mute the activities of activist hedge funds unless the courts start to recognize the value of HFA as a corrective mechanism and thereby feel the need to make an exception to their traditional approach to judicial review—strong deference to Board authority. It is also provides an example of how history may repeat itself, setting the stage for hedge fund activism to follow in the footsteps of hostile bidders and their use of tender offers under the *Unocal* test.

A. The Unocal Test and Hostile Bidders

The *Unocal* test was created by the courts as a standard of review for Board actions to ward off a hostile bidder (defensive measures). 97 It

⁹⁵ *Id.* at 116, 119.

⁹⁶ Third Point LLC v. Ruprecht, No. 9469-VCP, 2014 WL 1922029 (Del. Ch. May 2, 2014).

⁹⁷ Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946, 955 (Del. 1986).

provides "enhanced scrutiny"98 when issues of control exist and therefore a heightened suspicion that Board action may be as a result of bad faith or for purposes of entrenchment.⁹⁹ There are two prongs to the *Unocal* test. The first prong requires the Board, who has the burden of proof, to demonstrate "reasonable grounds for believing that a danger to corporate policy and effectiveness existed."100 Directors satisfy this prong by demonstrating "good faith and reasonable investigation." Good faith in this context can be understood as the Board having a "sincere belief" that such a threat existed. 102 Reasonable investigation is linked with the process of being informed under the business judgment rule. 103 If the Board can show that it was informed, then reasonable investigation has been satisfied.¹⁰⁴ To show reasonable investigation without more, "direct investigation, receipt of professional advice, and personal observations" will suffice. 105 Evidence of "good faith and reasonable investigation" 106 is "materially enhanced . . . by the approval of a board comprised of a majority of outside independent directors."107

The second prong, "a proportionality test, [must be] satisfied by a demonstration that the . . . defensive measure was reasonable in relation to the threat posed." The review for proportionality is another two-part test. ¹⁰⁹ First, the court must determine whether the defensive measure was

When the *primary purpose* of a board of directors' defensive measure is to interfere with or impede the effective exercise of the shareholder franchise in a contested election for directors, the board must first demonstrate a compelling justification for such action as a condition precedent to any judicial consideration of reasonableness and proportionately.

MM Cos. v. Liquid Audio, Inc., 813 A.2d 1118, 1132 (citing Stroud v. Grace, 606 A.2d 75, 91 (Del. 1992)). For a discussion of how the *Blasius* standard was applied in *Third Point LLC v. Ruprecht*, see Sharfman, A Theory of Shareholder Activism, supra note 9, at 826-31.

⁹⁸ Enhanced scrutiny refers to an "enhanced duty which calls for judicial examination at the threshold before the protections of the business judgment rule may be conferred." *Unocal*, 493 A.2d at 954.

⁹⁹ Moran v. Household Int'l, Inc., 500 A.2d 1346, 1356 (Del. 1985).

¹⁰⁰ *Unocal*, 493 A.2d at 955 (citing Cheff v. Mathes, 199 A.2d 548, 554-55 (Del. 1964)).

¹⁰¹ Id.

The equivalency of "good faith" and "sincere belief" was established in *Cheff v. Mathes*, the case that provided the first prong of the *Unocal* test. *See* Leo E. Strine Jr., Lawrence A. Hamermesh, R. Franklin Balotti, & Jeffrey M. Gorris, *Loyalty's Core Demand: The Defining Role of Good Faith in Corporation Law*, 98 GEO. L. J. 629, 670 (2010) (citing *Cheff*, 199 A.2d at 554).

¹⁰³ Moran, 500 A.2d at 1356.

¹⁰⁴ *Id*.

¹⁰⁵ Cheff, 199 A.2d at 556.

¹⁰⁶ Id at 555

¹⁰⁷ *Unocal*, 493 A.2d at 955 (citing *Cheff*, 199 A.2d at 555). Prior to applying *Unocal*'s second prong, the *Blasius* standard of review must be included in the court's review when a contested election (proxy contest) is affected by the Board actions:

¹⁰⁸ Third Point LLC, 2014 WL 1922029, at *17 (quoting Unocal, 493 A.2d at 955).

¹⁰⁹ Id.

"draconian, by being either preclusive or coercive." Second, "if the Board's response to the threat was [determined] not [to be] draconian, the Court must then decide [if the defensive measure] fell 'within a range of' reason." 111

Under the *Unocal* test, the Courts have been very permissive in allowing Boards to maintain and implement defensive measures, such as poison pills, for purposes well beyond protecting shareholders from "coercive two-tier tender offers" offered by hostile bidders even allowing Boards to implement defensive measures to protect against all-cash offers for 100% of the company's shares. As Mary Siegel reports, even though the burden of proof is on defendants, defensive measures reviewed under the *Unocal* test have an overall survival rate of 79%. Of course, as already discussed, from the perspective of a judge or chancellor this approach makes sense. The Board, not the court, is in the best position to evaluate whether a defensive measure maximizes shareholder wealth. Perhaps most critical to the development of this over-permissive approach was the absence of any mention of Henry Manne's article, "Mergers and the Market for Corporate Control," in the *Unocal* opinion, even though the court must have been aware of that famous article's existence.

Unfortunately, the over-permissive approach taken under the *Unocal* test has created the classic example of how corporate law can destroy the value of a corrective mechanism. In this case, it is the hostile bidder who is the corrective mechanism. The courts, along with the Williams Act and state takeover statutes, have played a major role in eliminating an important technique for correcting managerial inefficiencies: the hostile tender offer. According to Macey when discussing the permissive use of the poison pill:

Thus, by judicial fiat, the Delaware courts have removed from the marketplace the hostile tender offer, which is the most powerful corporate governance device in the shareholders' corporate governance arsenal. As Baums and Scott presciently have observed, "Delaware jurisprudence seems to be willing, in substance . . . to give management something approaching an absolute veto over hostile tender offers despite overwhelming evidence that they confer large benefits on target shareholders." Again, just as courts and legislatures have

¹¹⁰ *Id.* (quoting Unitrin, Inc. v. Am. Gen. Corp., 651 A.2d 1361, 1367 (Del. 1995)).

¹¹¹ *Id.* (quoting *Unitrin*, 651 A.2d at 1367).

¹¹² Jonathan R. Macey, *The Politicization of American Corporate Governance*, 1 VA. L. & BUS. REV. 10, 35 (2006) ("Courts have failed to restrict the use of poison pills to their proper context—the regulation of coercive two-tiered tender offers.") [hereinafter, Macey, *The Politicization of American Corporate Governance*].

¹¹³ Id. (citing Paramount Commc'ns v. Time Inc., 571 A.2d 1140, 1142 (Del. 1989) (allowing Time to retain poison pill despite all-cash offer.)

Mary Siegel, The Illusion of Enhanced Review of Board Actions, 15 U. PA. J. Bus. L. 599, 621 (2012).

¹¹⁵ DEL. CODE ANN. tit. 8, § 203.

¹¹⁶ Macey, The Politicization of American Corporate Governance, supra note 112, at 36.

undermined the vitality of credit rating agencies and accounting firms, they have undermined the market for corporate control. 117

The inability to identify a nuanced approach that would have allowed hostile tender offers to survive as a corrective mechanism must be considered a judicial failure. Once the legal rule was put into place that allowed a poison pill to easily defend against a hostile tender offer, there were no longer any incentives for a hostile bidder to search for companies with managerial inefficiencies who resisted their correction through a friendly merger. Thus, corporate law had effectively killed off the hostile tender offer. Viewed from this perspective, Frank Easterbrook and Daniel Fischel's proposal to correct this failure through a mandatory legal rule, the "passivity rule," a rule that would not allow Boards to take defensive actions in the face of a hostile tender offer, seems reasonable as a means to enhance shareholder wealth.

Moreover, even though it is beyond the scope of this Article, perhaps it is time to consider changes to statutory corporate law that would limit the use of the poison pill when the hostile bidder is making an all-cash all-shares tender offer, unless it is permitted in the original charter or through a charter amendment. Such statutory changes may allow hostile tender offers to reappear in the market for corporate control in a limited but significant way. In sum, the elimination of hostile tender offers was a loss for efficient decision making and shareholder wealth maximization. The hope is that history will not repeat itself when the courts review Board actions in the context of HFA.

B. Third Point

In determining how to apply the *Unocal* test to fact patterns involving HFA, the courts will need to take into consideration the numerous empirical studies that have found HFA to be wealth enhancing for shareholders. This should give the courts pause to take any actions that would significantly reduce the role of HFA as a corrective mechanism in corporate governance.

¹¹⁷ *Id*.

Frank H. Easterbrook & Daniel R. Fischel, *Auctions and Sunk Costs in Tender Offers*, 35 Stan. L. Rev. 1, 1 (1982) [Hereinafter, Easterbrook & Fischel, *Auctions and Sunk Costs in Tender Offers*].

Easterbrook & Fischel, Responding to a Tender Offer, supra note 93, at 1201-04. See also, Easterbrook & Fischel, Auctions and Sunk Costs in Tender Offers, supra note 118 (arguing that the ability of target companies to auction themselves in response to a hostile tender offer would not be beneficial to shareholders as a whole versus total passivity on the part of the Board). Globally, a passivity rule is not unheard of. For example, the takeover laws of the United Kingdom require that target Boards be passive in the face of a takeover attempt. See THE PANEL ON TAKEOVERS AND MERGERS, THE CITY CODE ON TAKEOVERS AND MERGERS, rule 21 (11th ed. 2013), http://www.thetakeoverpanel.org/uk/wp-content/uploads/2008/11/code.pdf.

Unfortunately, like with defensive measures, the problem the courts have is determining whether the actions taken by the Board are wealth enhancing under the specific facts provided for their review. Therefore, another judicial failure, like the one that occurred with hostile tender offers, may occur if the courts take the path of least resistance and apply their default approach to maximizing shareholder wealth—deference to Board authority. However, empirical evidence showing the value of HFA tells us something else; that such deference no longer needs to be provided when reviewing Board actions that interfere with HFA. If the courts cannot make adjustments to accommodate HFA, then an opportunity to enhance shareholder wealth will be lost. This potential lack of flexibility under exceptional fact patterns is the judicial failure; a judicial failure that has the potential to shut down HFA like it did with hostile tender offers.

This lack of judicial flexibility is demonstrated in the relatively recent court case of *Third Point LLC v. Ruprecht*, a case where the Board implemented a poison pill that discriminated against activist hedge funds. In *Third Point*, the court chose the *Unocal* test as its standard of review. The court felt compelled to do so because the *Unocal* test has been Delaware's exclusive standard of review for poison pills since the landmark case of *Moran v. Household International, Inc.*¹²⁰ Moreover, "[a] reviewing court must apply the *Unocal* standard of review whenever a board of directors adopts any defensive measure 'in response to some threat to corporate policy and effectiveness which touches upon issues of control."¹²¹ The pertinent facts of *Third Point* are as follows:

Sotheby's, a high-end art auction house, became the target of Third Point LLC ("Third Point"), an activist hedge fund, who ultimately held 9.6% of Sotheby's voting common stock. Sotheby's also became the target of two other activist hedge funds, Trian Fund Management and Marcato Capital Management. At the time when Third Point's accumulation of stock had reached 9.4%, Sotheby's Board adopted a Shareholder Rights Plan (poison pill). The poison pill included an unusual discriminatory trigger. The trigger level would be anything greater than 20% ownership of the company's voting common stock if it involved a passive investor as identified by an SEC Form 13G filing.

¹²⁰ Third Point LLC v. Ruprecht, No. 9469-VCP, 2014 WL 1922029, at *15 (Del. Ch. May 2, 2014) (citing Moran v. Household Int'l, Inc., 500 A.2d 1346 (Del. 1985)).

¹²¹ MM Cos. v. Liquid Audio, Inc., 813 A.2d 1118, 1129–30 (Del. 2003) (quoting Gilbert v. El Paso Co., 575 A.2d 1131, 1144 (Del. 1990)).

¹²² Third Point LLC, 2014 WL 1922029, at *2.

¹²³ Id. at *3-4.

¹²⁴ Id. at *9.

¹²⁵ Id. at *10.

¹²⁶ *Id*.

However, the trigger level would only be anything greater than 10% if it involved a hedge fund activist as identified by a Form 13D filing. 127

Unsurprisingly, Third Point and other shareholders challenged the implementation of this rights plan in court. In its review under the first prong of the *Unocal* test, the Court accepted that the threat to corporate policy and effectiveness was the Board's concern for "creeping control." That is, the aggregate position held by the activist hedge funds in the company's common stock could potentially allow them to gain "effective control" without paying a control premium." Moreover, the Court accepted that it was reasonable for the Board to fear that the activist funds were forming a "wolf pack" for such a purpose. 132

In its review under the second prong, the Court found reasonable, consistent with the "wolf pack" theory, that "[a] trigger level much higher than 10% could make it easier for a relatively small group of activist investors to achieve control, without paying a premium, through conscious parallelism." Therefore, the adoption of the discriminatory poison pill as implemented by Sotheby met the requirements of the *Unocal* test.

However, going forward, the Court needs to be very wary of labeling the presence of a "wolf pack" as a proxy for an actual threat to corporate policy and effectiveness. Recent empirical research has shown that hedge fund activism involving wolf packs results in the highest disclosure returns for shareholders. This has been attributed to the higher probability of gaining an outcome such as Board representation through wolf pack activism. Such activism has greater influence given that there are multiple parties with a unified vision on how the target company needs to

¹²⁷ *Id*.

¹²⁸ *Third Point LLC*, 2014 WL 1922029, at *17.

Yucaipa Am. Alliance Fund II v. Riggio, 1 A.3d 310, 350 (Del. Ch. 2010) (holding that without a poison pill, the hostile bidder could amass "an effective control bloc that would allow it to [wield] great leverage . . . at the expense of other investors.").

¹³⁰ Third Point LLC, 2014 WL 1922029 at *17.

¹³¹ *Id.* A wolf pack is made up of a "loose network of activist investors" able to "take collective (or, at least, parallel) action without forming a 'group' for purposes of the federal securities laws (which would trigger an earlier disclosure obligation)." *See* John C. Coffee, Jr. & Darius Palia, *The Wolf at the Door: The Impact of Hedge Fund Activism on Corporate Governance* 29 (Columbia Law and Economics, Working Paper No. 521, 2015). According to Brav, Dasguptaz and Mathews, a wolf pack is made up of a lead hedge fund and multiple peripheral activists. *See* Alon Brav, Amil Dasgupta & Richmond Mathews, *Wolf Pack Activism* (Robert H. Smith School, Research Paper No. RHS 2529230, 2016). In *Third Point*, Third Point LLC would be the lead activist.

¹³² Third Point LLC, 2014 WL 1922029, at *17.

¹³³ Id. at *20.

Marco Becht, Julian R. Franks, Jeremy Grant, & Hannes F. Wagner, *The Returns to Hedge Fund Activism: An International Study, supra* note 30, at 4 (yielding 14% disclosure returns versus 6% returns for single funds).

¹³⁵ *Id.* (significantly higher probabilities of generating an outcome such as obtaining Board representation through wolf pack versus single funds, 78% versus 46%).

be restructured. 136 Interestingly, according to Becht, Franks, Grant and Wagner:

Wolf packs do not earn higher returns upon disclosure of outcomes. Therefore, it appears that the much higher initial announcement returns of wolf packs versus stand-alone activists are driven by expectations of wolf packs having higher probabilities of achieving the outcomes they seek, instead of implementing more profitable outcomes. 137

Moreover, it has been reported that those companies who put up the most resistance to wolf pack activism suffer from their resistance in terms of both operating performance and shareholder value. 138

Unfortunately, the apparent overemphasis on the "wolf pack" theory to establish a "cognizable threat" under the Unocal test was not the only disturbing part of the opinion. What was also disconcerting was how the Court reviewed the Board's refusal to waive the 10% trigger. This occurred after Third Point amended its Schedule 13D to announce that it was initiating a proxy contest to elect a slate of three directors to be voted on at the next annual meeting.¹³⁹ In conjunction with that announcement, Third Point requested that Sotheby's waive the 10% trigger and allow it to purchase up to a 20% stake in the company. 140 The Board quickly denied the waiver, knowing that the proxy contest was most likely a dead heat and that the waiver would favor Third Point in the vote. 141

The denial of the waiver, another Board decision reviewed under the Unocal test, occurred five months after the rights plan was implemented. 142 At this point in time the Court was skeptical that a threat to corporate policy and effectiveness still existed since it was doubtful that the Board could establish that it "had an objectively reasonable belief that Third Point continued to pose a creeping control risk to the Company, either individually or as part of a wolf pack."143

Nevertheless, the court found that the "objectively reasonable and legally cognizable threat" that the Board decision was responding to was "negative control," 144 i.e., obtaining "a controlling influence without paying a premium."¹⁴⁵ According to the Court:

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136 Id. at 22.
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¹³⁷ *Id*.

¹³⁸ Nicole M. Boyson & Pegaret Pichler, Obstructing Shareholder Coordination in Hedge Fund Activism 1 (Ne. U. D'Amore-McKim School of Business, Research Paper No. 2727343, 2016).

¹³⁹ Third Point LLC, 2015 WL 1922029, at *12.

¹⁴⁰ *Id*.

¹⁴¹ *Id.* at*13-14.

¹⁴² *Id*.

¹⁴³ *Id.* at *21.

¹⁴⁴ *Id*.

¹⁴⁵ Third Point LLC, 2015 WL 1922029, at *13.

Moreover,

If Third Point . . . achieved 20% ownership . . . that fact, combined with the aggressive and domineering manner in which the evidence suggests Loeb has conducted himself in relation to Sotheby's, provides an adequate basis for legitimate concern that Third Point would be able to exercise influence sufficient to control certain important corporate actions, such as executive recruitment, despite a lack of actual control or an explicit veto power. ¹⁴⁷

This new recognition of "negative control" as a legally cognizable threat is troubling. Taking advantage of what the Court calls "negative control" is precisely how HFA benefits the corporate governance of the firm. The activist hedge fund tries to exert as much influence as possible on the Board under the constraint of not having actual control. Even the court acknowledged that significant problems exist with applying negative control under *Unocal*: "The notion of effective, rather than explicit, negative control obviously raises some significant concerns, chief among them being where does one draw the line to ensure that 'effective negative control' does not become a license for corporations to deploy defensive measures unreasonably." Most troubling is that the finding of "negative control" in *Third Point* is consistent with the courts traditional permissive approach to the *Unocal* test.

V. GENERAL RECOMMENDATIONS ON JUDICIAL REVIEW

In the context of judicial review of Board actions taken to mute the activities of activist hedge funds, continued strong deference to Board authority would be a repetition of the mistake made with hostile tender offers and be counter to the objective of shareholder wealth maximization. HFA has a role to play as a corrective mechanism in corporate governance and it is up to the courts to find a way to make sure it continues to have a significant impact despite the courts' inclination to yield to Board authority.

In practice, this means that when the plaintiff is an activist hedge fund and the standard of review is the *Unocal* test because issues of control are present, a less permissive approach needs to be applied, requiring the courts to apply a high threshold of proof when interpreting the actions of activist

¹⁴⁶ Third Point LLC, 2015 WL 1922029, at *21.

¹⁴⁷ *Id.* at *22.

¹⁴⁸ Id.

hedge funds as an attempt to gain control. More specifically, when courts review a poison pill, this means not presuming that the presence of a wolf pack necessarily means that an attempt is being made to gain effective control without paying a control premium, making sure the trigger levels never go so low as to make it uneconomic for activist hedge funds to participate in the market of corporate influence, and avoiding novel theories such as "negative control" to establish a "cognizable threat."

If there are no issues of control in fact patterns where the Board's actions are taken to mute the activities of activist hedge funds, then Board independence and reasonable investigation still needs to be the focus. That is, before the business judgment rule can be applied, the courts need to utilize an enhanced level of scrutiny in determining whether the Board is truly independent of executive management or any other insider such as a fellow Board member. As previously discussed, Board independence is critical to maximizing the value of HFA. Moreover, reasonable investigation of the activist hedge fund's recommendations should be required to justify Board action taken to mute the fund's influence. Like the Unocal test, the burden of proof for establishing independence and reasonable investigation needs to be put on the Board. In sum, what is required in the court's review of Board actions taken to mute the influence of activist hedge funds where no issues of control are present is something similar to the first prong of the *Unocal* test except independence and reasonable investigation is now focused on the Board's evaluation of the fund's recommendations, not the threat to corporate policy and effectiveness.

Fortunately, despite the less than supportive opinion in *Third Point*, an opinion that was published on May 2, 2014, there was still a record 355 activist hedge fund campaigns in 2015 with 127 of those campaigns resulting in at least one board seat for the activist hedge fund, or in the activist having a significant say in the appointment of a new independent director. Nevertheless, given that there are a lot of creative corporate attorneys out there, it is possible that the next Marty Lipton will soon arise and find a creative and powerful new way to mute the activities of activist hedge funds. As time passes, the likelihood of such an event will increase. Therefore, sooner rather than later, the courts should start looking at the review of Board actions to mute these activities in a new light, before their own precedent ties them into knots and the value of HFA as a corrective mechanism is eventually lost.

¹⁴⁹ Stephen Foley, *The all-singing, all-dancing activist hedge fund*, FINANCIAL TIMES (January 3, 2016, 12:14 AM), http://www.ft.com/intl/cms/s/0/cbfc05f6-afae-11e5-993b-c425a3d2b65a.html.

THE FINAL STEP TO INSIDER TRADING REFORM: ANSWERING THE "IT'S JUST NOT RIGHT!" OBJECTION

John P. Anderson*

INTRODUCTION

One of the most often quoted passages in Henry Manne's seminal book, *Insider Trading and the Stock Market*, occurs where Manne lumps together arguments against insider trading that turn on considerations of ethics or fairness as "it's just not right" propositions. In a footnote, Manne explains that this expression originated with an anonymous lady law student, who, during a classroom discussion of the subject, stamped her foot and angrily declared, "I don't care; it's just not right."

For Manne, if repetition of such moral exhortations "were a form of scientific proof, undoubtedly the case against insider trading would long ago have been proved." Such cynicism concerning ethical justification in the law can be traced back to the early legal realists, but it has been particularly pronounced among members of the modern law and economics movement, of which Manne was, of course, a founder. The criticism seems to be that, by comparison to economic analysis, ethical justification is insufficiently "rigorous" or "scientific" to determine clear and effective legal principles.

Indeed, Manne (like many other leaders of the law and economics school) was of the opinion that most, if not all, first-order ethical propositions ultimately rest on economic justifications—that what is *right* can usually be cashed out in terms of what is *efficient*. I think this view is mistaken. But more important for the topic at hand, I think this view is counterproductive to those of us who share the opinion that the current

^{*} Associate Professor of Law, Mississippi College School of Law. Many thanks to George Mason University School of Law and to the Law and Economics Center for inviting me to present during their Symposium on the Continuing Influence of Henry G. Manne. Thanks to workshop participants Bradley Bondi, Michael Borden, Gaston de los Reyes, Jr., Yuliya Guseva, Todd Henderson, Joseph Hylton, Jason Jones, Jeremy Kidd, George Mocsary, Kish Parella, Kenneth Rosen, Paul Salamanca, Andrew Schwartz, Bernard Sharfman, Edward Stringham, J.W. Verret, Andrew Verstein, Lua Yuille, and Todd Zywicki, for their shared insights and helpful comments. Thanks also to organizers Jeffrey Smith and Amanda Olsavsky Hu for their wonderful hospitality.

¹ HENRY G. MANNE, INSIDER TRADING AND THE STOCK MARKET 15 (1966).

² *Id.* at 15, n. 42.

³ *Id.* at 15.

⁴ See, e.g., Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARVARD L. REV. 457, 464 (1897) ("I often doubt whether it would not be a gain if every word of moral significance could be banished from the law altogether.").

insider trading enforcement regime is in desperate need of liberalization and reform.

The problem is that, despite the fact that the economic analysis of Manne, Jonathan Macey,⁵ Dennis Carlton & Daniel Fischel,⁶ Todd Henderson,⁷ and others have been successful in showing that the current insider trading enforcement regime is highly inefficient, most academics, politicians, regulators, and journalists continue to justify it in ethical terms.⁸ With the principals to the debate speaking at cross-purposes, the result is a standoff that favors the status quo and precludes reform. This reality has led most commentators, even those of an economic bent, to reach the conclusion that the current insider trading enforcement regime "is doubtless here to stay." This is a serious problem because, in addition to being inefficient, the current insider trading enforcement regime is unjust, incoherent, and irrational.

This Article proceeds as follows: Section I sets the table by dismissing the notion that economic analysis of law should enjoy some privileged status (as more precise, rigorous, or scientific) over ethical analysis of law. Rather, it is suggested that economic and ethical reasons are best understood as different tools suited for different roles in legal reform. It is then argued that, given the current climate, ethical reasoning is the best tool for overcoming the remaining obstacles to insider trading reform in the United States. Section II begins the ethical analysis by arguing that even if it were admitted that insider trading harms society and is morally wrong, the current enforcement regime would still be unjust, incoherent, irrational. and in desperate need of reform. Section III proposes the legalization of issuer-licensed insider trading as one effective means of reforming the current regime but anticipates the "it's just not right" objection. Section IV confronts the "it's just not right" objection on its own ethical terms and demonstrates that, while it is true that some forms of insider trading are not morally permissible on either consequentialist or deontological grounds,

 $^{^{5}}$ See generally, Jonathan R. Macey, Insider Trading: Economics, Politics, and Policy (1991).

 $^{^6}$ $\,$ See generally, Dennis W. Carlton & Daniel R. Fischel, The Regulation of Insider Trading, 35 STAN L. Rev. 857 (1983).

⁷ See generally, M. Todd Henderson, Insider Trading and CEO Pay, 64 VAND. L. REV. 505 (2011).

⁸ See, e.g., Peter J. Henning, What's So Bad About Insider Trading Law, 70 Bus. LAW. 751, 775 (2015) ("There are questions about whether [the current insider trading enforcement regime] is the best... from an economic viewpoint to encourage efficient trading, but that is likely not the only goal in prohibiting trading that carries a stigma of unfairness and cheating.").

⁹ STEPHEN BAINBRIDGE, INSIDER TRADING: LAW AND POLICY 207 (2014). Even Manne himself hinted at some resignation in this regard. In email correspondence, he expressed frustration that "Judge Posner recently said that he didn't see that there was any basis for arguing about [insider trading] since people just don't like it!"). Email from Henry Manne to John P. Anderson (Sept. 6, 2012, 20:48 UTC) (on file with author).

issuer-licensed insider trading *is* morally permissible. Nevertheless, some object to insider trading, not on consequentialist or deontological moral grounds, but because it reflects the vice of greed. Section V closes by addressing this ethical concern. It is argued that criminalizing issuer-licensed insider trading is not only a poor means of combating the character flaw of greed, but that criminalization on such grounds would be moralistic (like laws against sodomy or same-sex marriage) and would therefore conflict with our society's increasingly shared repugnance toward such laws. Finally, if our criminalization of issuer-licensed insider trading cannot be justified on moral or ethical grounds, it must be explained. Some have suggested that society's envy of those who earn "easy money" offers the explanation. However, envy is perhaps the worst of all vices, and the Article closes by cautioning against its seduction.

I. ETHICS AND ECONOMICS: CHOOSING THE RIGHT TOOL FOR THE JOB

Richard Posner echoes the view of many proponents of the law and economics movement when he writes that the "compartmentalization of knowledge—so conspicuous a feature of the modern world—may have condemned [ethical theory] to irrelevance at the level of practice." For Posner, the legal problems facing rich liberal countries in the twenty-first century

present difficult analytical and empirical issues that can no more be understood, let alone resolved, by the intuitions and analytic procedures of persons schooled only in the humanities than problems of high-energy physics or brain surgery can be understood and resolved by the study of the *Tractatus Logico-Philosophicus*. ¹¹

¹⁰ RICHARD POSNER, OVERCOMING THE LAW 446 (1995).

¹¹ *Id.* at 456. Published in 1921, Ludwig Wittgenstein's *Tractatus* is regarded as one of the most esoteric yet important works of twentieth century philosophy. The book aims to define the limits of science and metaphysics. It was extremely influential among logical positivists and early philosophers of language. In his later work, Wittgenstein distanced himself from the "dogmatism" of the *Tractatus*. The later Wittgenstein eschewed the *Tractatus's* attempt at logical precision in favor of a pragmatism that regards philosophy as nothing more (or less) than a therapeutic tool that is most useful in "language games" that are divided against themselves, with participants working at cross purposes. In such cases, philosophy's task is to expose the problem and thereby help to "shew the fly the way out of the fly bottle." LUDWIG WITTGENSTEIN, PHILOSOPHICAL INVESTIGATIONS § 309 (G.E.M. Anscombe, trans., 3rd ed. 1967). With this in mind, I suggest that though Wittgenstein would agree with Posner's conclusion that his *Tractatus* is of little use in the language games played by surgeons and physicists as such, he would also be sympathetic to the thesis of this Article, which is that there are some dysfunctional language games, of which our current insider trading enforcement regime is one, within which the tools of ethical philosophy can be of great practical import by perhaps showing the fly out of the bottle!

Posner is fond of dismissing ethics as a mode of legal justification by claiming that such appeals may "persuade, but not with rational arguments." For Posner, "[a]t its best, moral philosophy, like literature, enriches; it neither proves nor edifies." Good economic analysis of the law, by contrast, is purported to offer firm, rational grounds for its conclusions that are objectively verifiable. It is argued that economic analysis "epitomizes the operation in law of the ethic of scientific inquiry, pragmatically understood," and is therefore far better suited than ethical reasoning to the challenges of the age. In sum, economic analysis, which is science, should be privileged over ethical analysis, which reduces to nothing more than "epistemically feeble" exhortation, when analyzing and justifying the law. But even Posner must admit that things are not that simple.

First, without the aid of ethical justification, micro-economics can never hope to bridge the "is/ought gap"—it can never hope to transform its descriptions of market behavior to prescriptions for reform.¹6 As Posner himself explains, "nothing in economics prescribes an individual's goals. But whatever his...goals," rational choice theory provides a tool for charting the most efficient path to achieving them.¹7 The first inquiry, then, is always what are your goals? Or, as a legal community, what are *our* goals? In most cases, this question can only be answered by an appeal to our ethical values, our conceptions of what is good and what is right. When there is dispute over these goals, only ethical reasons can resolve them. In this sense, ethical reasoning is logically prior to economic reasoning as tool for social reform. In sum, ethics must be relied upon to set our ends, and economics are at most instrumental to achieving them.

But I think Posner's real frustration with ethical justification in the law is that, however that justification is articulated, it offers no rational or

 $^{^{12}}$ RICHARD POSNER, THE PROBLEMATICS OF MORAL AND LEGAL THEORY, at ix (1999).

¹³ Id. at 32.

POSNER, supra note 10, at 15.

POSNER, supra note 12, at 12.

The is/ought gap refers to the fallacy of trying to derive a normative conclusion (an "ought") from purely descriptive ("is") premises. The philosopher David Hume is credited as the first to give expression to this problem (sometimes referred to as "Hume's Guillotine" or the "naturalistic fallacy"):

In every system of morality which I have hitherto met with, I have always remarked that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a god, or makes observations concerning human affairs; when of a sudden I am surprised to find that instead of the usual copulations of propositions is and is not, I meet with no proposition that is not connected with an ought or an ought not. This change is imperceptible, but is, however, of the last consequence. For as the ought or ought not expresses some new relation or affirmation, it is necessary that it should be observed and explained; and at the same time that a reason should be given for what seems altogether inconceivable, how this new relation can be a deduction from others which are entirely different from it.

DAVID HUME, MORAL AND POLITICAL PHILOSOPHY 43 (Henry D. Aiken, ed., 1948).

POSNER, *supra* note 10, at 16.

objective grounds. While it may persuade, it does so with grunts and cheers, not "rational argument." It is the same frustration Manne expresses over his student's foot-stomping. For Posner, moral claims once espoused by Enlightenment proponents like Locke, Rousseau and Jefferson as universal and rationally demonstrable are today "better understood as just the fancy dress of workaday social norms that vary from society to society."18 But this leads to my second point. Even assuming arguendo that Posner is correct to claim that ethical propositions are not objective, the contingent and provincial nature of an ethical claim does nothing to diminish its rational force within the culture or practice that avows it. In other words, moral relativism need not be vicious or pernicious. For example, the fact that individual autonomy is not valued as highly in some Asian cultures does not undermine its crucial importance within our own constitutional culture. Moreover, once definitions are fixed and inferential relations are set, ethical analysis can be every bit as precise, rigorous, and testable as can micro-economic analysis. Of course the devil is often in fixing those definitions and relations to our audience's satisfaction, but those devils are just as pesky when setting up microeconomic models. I am reminded of George E. P. Box's statement that is so often repeated by economists, "all models are wrong, but some are useful."19

None of the above is intended to turn the table on Posner and make the claim that economic analysis must always take a back seat to ethics in justifying existing law or proposing a legal reform. Quite often, indeed most of the time, the "end" set by ethics is not in dispute but rather, only the most appropriate means to that end. When this is true, economic analysis will rightly dominate the debate over needed reform. But insider trading regulation in the United States offers one of those relatively rare situations where, thanks to the excellent work of Manne and others, the economic stakes of enforcement are now fairly well-defined, but few seem able to agree on its *ends*. There seems to be broad consensus that liberalizing the current regime would improve efficiency. Resistance to such liberalization, however, comes almost exclusively from those who are concerned that any such liberalization would render markets unjust or unfair and would only spread the current epidemic of greed on Wall Street.

If your only tool is a hammer, every problem looks like a nail. The frustration and resignation of many advocates for insider trading reform stems from the fact that they persist in making strong economic arguments to address a problem the public no longer frames in economic terms. They speak at cross-purposes with their adversaries, and the resulting standoff favors the status quo. Economics is simply the wrong tool for the job that remains. The last step to insider trading reform consists of winning the

¹⁸ POSNER, supra note 12, at 6.

¹⁹ GEORGE E.P. BOX & NORMAN R. DRAPER, EMPIRICAL MODEL-BUILDING AND RESPONSE SURFACES 424 (1987).

hearts and minds of those who resist it. This demands advocacy that draws upon ethical theory and the paradigms of justice, fairness, and the good which are latent within our public political culture. In what follows, I sketch out how some of these arguments might look.

II. CURRENT ENFORCEMENT REGIME IS UNJUST AND IRRATIONAL—REFORM IS NEEDED

I have argued elsewhere that the current insider trading enforcement regime in the United States is unjust, incoherent, and irrational.²⁰ Under the current regime, draconian penalties²¹ are imposed for a crime which has never been defined by statute or rule.²² The principal statutory authority for insider trading liability is Section 10(b) of the Securities Exchange Act of 1934, which prohibits the employment of "any manipulative or deceptive device or contrivance [in] connection with the purchase or sale, of any security."²³ Though Section 10(b) functions as a "catch-all" provision, the Supreme Court has made it clear that "what it catches must be fraud."²⁴ But insiders typically gain their advantage by withholding their material nonpublic information while trading over anonymous exchanges. The common law only regards such silence as fraudulent when there is some

²⁰ See generally, John P. Anderson, Greed, Envy, and the Criminalization of Insider Trading, 2014, UTAH L. REV. 1 (2014) [hereinafter Greed & Envy]; John P. Anderson, Anticipating a Sea Change for Insider Trading Enforcement Law: From Trading Plan Crisis to Rational Reform, 2015 UTAH L. REV. 339 (2015) [hereinafter Anticipating a Sea Change]; John P. Anderson, What's the Harm in Issuer-Licensed Insider Trading?, 69 U. MIAMI L. REV. 795 (2015); John P. Anderson, Solving the Paradox of Insider Trading Compliance, 88 TEMPLE L. REV. 273 (2016) [hereinafter Paradox of IT Compliance]; John P. Anderson, When Does Corporate Criminal Liability for Insider Trading Make Sense?, STETSON L. REV.. (forthcoming).

²¹ See, e.g., Stephen Bainbridge, Incorporating State Law Fiduciary Duties into the Federal Insider Trading Prohibition, 52 WASH. & LEE L. REV. 1189 (1995) ("insider trading... carries penalties that can only be described as draconian) [hereinafter, State Law Fiduciary Duties]. With the passage of the Insider Trading and Securities Fraud Enforcement Act of 1988 (ITSFEA), the civil penalty of treble damages now applies to firms as well as individuals. Pub. L. No. 100-704, 102 Stat. 4677 (codified in scattered sections of 15 U.S.C. § 78 (2012)). With the passage of the Sarbanes-Oxley Act of 2002, the individual criminal penalty was raised to a fine of up to \$5 million and imprisonment up to 20 years per violation. Non-natural persons (i.e. firms) are subject to fines of up to \$25 million. 15 U.S.C. § 78ff(a). As one author points out, under "the federal guidelines, the maximum sentence for insider trading is nineteen to twenty-four years, while a rapist could get fifteen years to life in prison." CHARLES GASPARINO, CIRCLE OF FRIENDS 155 (2013).

As Stephen Bainbridge puts it, "the modern prohibition [of insider trading] is a creature of SEC administrative actions and judicial opinions, only loosely tied to the statutory language and its legislative history." SECURITIES LAW: INSIDER TRADING (2d ed. 2007).

²³ 15 U.S.C. § 78j(b) (2012).

²⁴ Chiarella v. United States, 445 U.S. 222, 234-35 (1980).

duty to disclose. The Supreme Court recognizes such a duty under two theories, the "classical theory" and the "misappropriation theory."²⁵

Insider trading liability arises under the classical theory when the issuer, its employee, or someone otherwise affiliated with the issuer seeks to benefit from trading (or tipping others who trade) that firm's shares based on material nonpublic information. In such cases, the insider (or constructive insider) violates a "fiduciary or other similar relation of trust and confidence" to her counterparty, the shareholder (or prospective shareholder) on the other side of the trade. Insider trading liability arises under the misappropriation theory when one misappropriates material nonpublic information and then trades on it without prior notice to the source. The "misappropriation theory premises liability on a fiduciary-turned-trader's deception of those who entrusted him with access to the confidential information" by cheating them out of "the exclusive use of that information."

A. Insufficient Notice of Crime

The fact that it has never been defined by statute leaves us with the "jurisprudential scandal that insider trading is largely a federal common law offense." The Western liberal jurisprudential tradition is suspicious of common law crimes like insider trading because they often violate the principle of legality, which is sometimes expressed in the Latin phrase, nullum crimen sine lege. The principle of legality holds that "there must be no crime or punishment except in accordance with fixed, reasonably specific, and fairly ascertainable preestablished law." This principle gives expression to our shared intuition that justice requires that persons be given reasonable notice of when criminal sanctions will be imposed. Otherwise persons would be left helpless to plan their lives to avoid such sanctions. The same moral intuition informs our repugnance towards ex post facto laws.

The history of U.S. insider trading enforcement offers a sad illustration of the perniciousness of common law crimes. For example, federal regulators imposed sanctions on individuals pursuant to the "equal access" or "parity-of-information" model of insider trading liability for over two decades before this model was ultimately rejected by the Supreme Court as

²⁵ See United States v. O'Hagan, 521 U.S. 642, 651-53 (1997).

²⁶ Chiarella, 445 U.S. at 228.

²⁷ O'Hagan, 521 U.S. at 652.

²⁸ Jeanne Schroeder, *Taking Stock: Insider and Outsider Trading by Congress*, 5 WM. & MARY BUS. L. REV. 159, 163 (2014).

²⁹ See e.g., DAVID A. J. RICHARDS, THE MORAL CRITICISM OF LAW 195 (1977).

³⁰ Id.

 $^{^{31}~}$ Such laws are, of course, unconstitutional pursuant to U.S. Const. art. I $\S\S$ 9-10.

inconsistent with its statutory authority in Section 10(b).³² Moreover, despite the fact that the Supreme Court's decision in *Chiarella v. United States* left the legal status of the misappropriation theory of insider trading liability uncertain, regulators continued to enforce it for the next seventeen years before it finally received the Court's imprimatur in *United States v. O'Hagan*.³³ The SEC and prosecutors continue to press for broader insider trading enforcement authority, and they would rather ask forgiveness than permission from the courts. Without a statutory definition, market participants are just left guessing as to whether that expanded authority will be recognized by some judge. Most would rather settle than take the risk, which is precisely the injustice the principle of legality looks to avoid.

It is worth noting that simply codifying the current working definition of insider trading would not solve the problem. Injustice due to inadequate notice would persist because the current definition's terms are hopelessly vague. Both the classical and misappropriation theories impose liability on those who seek to "benefit from trading . . . on the basis of material nonpublic information" in violation of a "fiduciary or other similar relation of trust and confidence," but few agree on the definition of any one of these terms.³⁴ In Connally v. General Construction Company, the Supreme Court held that a law violates due process when a person of "common intelligence must necessarily guess at its meaning."35 Some scholars have suggested that the law against insider trading is unconstitutionally vague.³⁶ Indeed it is hard to disagree with Steven Cohen, founder of SAC Capital Advisors, LP, and the target of multiple insider trading investigations, when he says "[i]t's my belief that the rule [against insider trading] is vague, and therefore . . . as a lawyer, you can interpret it in lots of different ways."37 As Professor Homer Kripke put it more generally, "fraud" in Rule 10b-5 has "come to mean anything that the SEC dislikes because by picking cases in which it can dramatically describe the facts, the SEC hopes that the facts

³² In 1968, the Second Circuit adopted the SEC's preferred equal access model for insider trading liability. SEC v. Texas Gulf Sulphur, 401 F.2d 833, 848 (2d Cir. 1968) (en banc) (noting section 10(b) is based "on the justifiable expectation of the securities marketplace that all investors trading on impersonal exchanges have relatively equal access to material information"). It took twenty-two years for this interpretation to reach the Supreme Court, when it was expressly rejected in favor of the fiduciary model now in place. The Court explained that the formulation of such a broad "parity-of-information rule," which "departs radically from the established doctrine that duty arises from a specific relationship between to parties . . . should not be undertaken absent some explicit evidence of congressional intent." *Chiarella*, 445 U.S. at 233.

³³ United States v. O'Hagan, 521 U.S. 642, 652-53 (1997).

³⁴ See, e.g., Anderson, Paradox of IT Compliance, supra note 20, at 278-87 (quoting Chiarella, 445 U.S. at 228).

³⁵ 269 U.S. 385, 391 (1926).

³⁶ See, e.g., Homer Kripke, Manne's Insider Trading Thesis and Other Failures of Conservative Economics, 4 CATO J. 945, 949 (1985).

³⁷ Greg Ferrell, *SAC's Cohen May Face SEC Suit as Deposition Hurts Case*, BLOOMBERG (Feb. 19, 2013, 5:00 PM), http://perma.cc/CY9K-KLNW.

will carry the law."³⁸ The latter concern, that regulators may exploit vagueness in the law to pursue their own institutional or even personal agendas, is shared by Justice O'Connor in *Kolender v. Lawson*:³⁹

[T]he more important aspect of vagueness doctrine "is not actual notice, but . . . the requirement that a legislature establish minimal guidelines to govern law enforcement." (citation omitted). Where the legislature fails to provide such minimal guidelines, a criminal statute may permit "a standardless sweep [that] allows policemen, prosecutors, and juries to pursue their personal predilections. ⁴⁰

U.S. Circuit Court Judge Barrington Parker expressed this concern during oral argument in *United States v. Newman*⁴¹ when he challenged the government's "amorphous theory" of insider trading liability as leaving "all these institutions at the mercy of the government." And there is evidence to suggest that abuse has occurred in the context of insider trading enforcement.

B. Abuse of Discretion

For instance, some have noted that enforcement officials and prosecutors are wont to "exploit the hostile reaction [insider trading] provokes among the general public" to "generate positive publicity" for themselves (or to deflect criticism) in the wake of market downturns. ⁴³ For example, in the wake of the sub-prime mortgage meltdown of 2008, the government needed "a white collar scandal that it could tout as having successfully prosecuted to satisfy the public's demand for Wall Street scalps." ⁴⁴ Insider trading prosecutions offered the anodyne for wounded political reputations: "[I]nsider trading was viewed as the easiest way to restore the [SEC's] reputation following the Madoff catastrophe and the image hit taken in the aftermath of the financial crisis." ⁴⁵ The government's "amorphous theories" of insider trading liability permitted it to rack up scores of white collar scalps at a near perfect conviction rate. These efforts put United States Attorney for the Southern District of New York, Preet Bharara, on the cover of *Time Magazine* with the headline, "This Man Is

³⁸ Kripke, *supra* note 36, at 949.

³⁹ Kolender v. Lawson, 461 U.S. 352 (1983)

⁴⁰ *Id.* at 358 (quoting Smith v. Goguen, 415 U.S. 566, 574-75 (1974)).

⁴¹ United States v. Newman, 773 F.3d 438, 442 (2d Cir. 2014).

⁴² See Nate Raymond, U.S. Prosecutor Grilled over Insider Trading Definition in Key Appeal, REUTERS (Apr. 22, 2014, 3:31 PM), http://www.reuters.com/article/insidertrading-appealidUSL2N0NE0OR20140422 (quoting U.S. Circuit Judge Barrington Parker).

⁴³ Henning, *supra* note 8, at 762.

⁴⁴ GASPARINO, *supra* note 21, at 17.

⁴⁵ *Id.* at 201.

Busting Wall St."⁴⁶ The fact that insider trading had nothing to do with the financial collapse was not important. Decades before, similar concerns were raised that then-United States Attorney Rudolph Giuliani sensationalized his insider trading cases in the 1980s for political purposes, and to support his immanent "bid for public office."⁴⁷

It has also been suggested that insider trading enforcement has been exploited by the SEC in its turf wars with other agencies over money, jurisdiction, and prestige. Professor Stephen Bainbridge explains that, according "to one widely accepted theory of bureaucratic behavior, administrators can maximize their salaries, power, and reputation by maximizing the size of their agency's budget." And Professor Macey claims that the SEC's "politicization of the insider trading issue" enabled it to "double its budget by arguing that more resources were necessary to combat [what it had convinced the public was a] dire national emergency." direction of the insider trading issue and the public was a directional emergency.

It is clear that money matters to prosecutors and the SEC every bit as much as it does to the insider traders they prosecute. For instance, in the 1980s, the SEC reached a \$100 million settlement with Ivan Boesky, but they needed him to sell his portfolio to get it. The SEC knew that news of Boesky's arrest would send the market into a tailspin, so it "directed Boesky to begin liquidating some of his holdings during the two weeks preceding the announcement."50 In other words, the SEC directed Boesky to trade on the material nonpublic information of his own charges and settlement to protect their \$100 million fine. The other arbitrageurs (and regular traders) betting alongside Boesky were livid when news of the SEC's complicity hit. The irony was not lost on the press either. The Washington Post ran a front-page story titled, "Wall Street Lambastes SEC Action: Agency Reportedly Let Beosky Sell Off Stocks in Advance."51 One trader, David Nolan, noted that "[t]he SEC has unwittingly aided one of the largest insider trading scams in history."52 Not long after providing this quote to the Post, Mr. Nolan himself was investigated for insider trading, which raises another concern.53

As one commentator explains, the "government, being the government, can always find something to charge you with, and they will

⁴⁶ Massimo Calabresi & Bill Saporito, *The Street Fighter*, TIME, Feb. 13, 2012, at 22.

 $^{^{47}}$ James B. Steward, Den of Thieves 383 (1992).

⁴⁸ Bainbridge, *State Law Fiduciary Duties*, *supra* note 21, at 1246.

⁴⁹ MACEY, *supra* note 5, at 4.

⁵⁰ STEWARD, *supra* note 47, at 337.

⁵¹ David A. Vise & Michael Schrage, Wall Street Lambastes SEC Action: Agency Reportedly Let Boesky Sell Off Stocks in Advance, THE WASHINGTON POST, Nov. 21, 1986, at A1.

⁵² Id.

⁵³ STEWARD, supra note 47, at 345.

do so if you rub their noses in it."54 Vague and amorphous prohibitions like insider trading are ready weapons for government agencies to retaliate against political enemies or to bully those who refuse to do their bidding. In 2014, Nelson Obus, whose hedge fund was the target of an insider trading enforcement action, authored a Wall Street Journal commentary entitled, "Refusing to Buckle to SEC Intimidation."55 In it, Obus paints the picture of a twelve-year SEC enforcement process that was short on substance and long on political motives. Vagueness in the law and virtually unlimited resources permitted the SEC to press even a weak case for over a decade at a cost of \$12 million in legal fees. 56 According to Obus, the SEC attempted to "bully" him into a settlement, but he refused to admit guilt since he had done nothing wrong.⁵⁷ Obus expresses concern that "not many small firms could be expected to weather such a storm from a system that provides regulators with every incentive to overreach without repercussions" and he worries that most will be forced to "settle or falsely admit wrongdoing."58

C. Current Regime Is Incoherent

In addition to being unjust for the reasons already stated, the current U.S. insider trading enforcement regime is incoherent. This incoherence is due to the fact that it is driven by two competing and irreconcilable rationales. The SEC and federal prosecutors continue to press for a parity of information (or at least equal access) regime through their rulemaking authority and prosecutorial discretion. The judiciary, on the other hand, remains committed to the fraud-based model reflected in the language of Section 10(b). The unsurprising result of this schizophrenia has been that in practice neither model is effectively implemented, and everyone is left guessing.

To begin, if the current regime is judged by the SEC's own stated goal of achieving a "level playing field" by guaranteeing that all market participants have equal access to information, then it is woefully underinclusive in its reach.⁵⁹ There are a number of forms of willful securities

⁵⁴ GASPARINO, *supra* note 21, at 230. The reference here is to John Kinnucan, an independent research analyst who refused to wear a wire for the government and was eventually convicted of securities fraud. Kinnucan is best known for his colorful (and often racist) email rants criticizing the government. Gasparino's book offers a detailed account of these events.

Nelson Obus, *Refusing to Buckle to SEC Intimidation*, WALL ST. J. (June 24, 2014, 7:37 p.m.) http://www.wsj.com/articles/nelson-obus-refusing-to-buckle-to-sec-intimidation-1403651178.

⁵⁶ *Id*.

⁵⁷ *Id*.

⁵⁸ *Id*.

⁵⁹ See, e.g., Marc I Steinberg, Insider Trading Regulation—A Comparative Analysis, 37 INT'L LAW 153, 158 (2003) ("The goal that ordinary investors play on a level playing field with market

trading based on material nonpublic information that are not proscribed under the current fiduciary-duty-based enforcement regime. For example, the current regime does not proscribe trading based on material nonpublic information acquired by eavesdropping or luck.⁶⁰ In *Dirks v. SEC*, the Supreme Court held that no Section 10(b) insider trading liability is incurred where a tippee trades on material nonpublic information that is provided by an insider who seeks no personal gain.⁶¹ Additionally, in United States v. O'Hagan, the Supreme Court explained that, since the "deception essential to the misappropriation theory involves feigning fidelity to the source of the information," there is no Section 10(b) liability for outsiders who brazenly announce to the source of the material nonpublic information that they intend to trade on it.62 Finally, the law currently permits insiders to profit by abstaining from trading based on material nonpublic information. As Manne explains, insiders "can make abnormal profits in the stock market simply by knowing when *not* to buy and when not to sell,"63 and the SEC only enhanced insiders' ability to profit from such strategic abstention by recognizing Rule 10b5-1 trading plans in 2000.64 The selective termination of Rule 10b5-1 trading plans effectively grants insiders a cost-free option to buy or sell based on material nonpublic information.65

If, however, the current enforcement regime is instead judged by the fraud *cum* fiduciary standard articulated by the courts, it is over-inclusive in two important respects. First, common law fraud requires some knowing deception, or scienter.66 The Supreme Court has consistently held that

10(b) insider trading jurisprudence.").

professionals, having equal access to material nonpublic information, no longer survives under Section

⁶⁰ See, e.g., SEC v. Switzer, 590 F. Supp. 756, 765-66 (W.D. Okla. 1984) (relying on Dirks v. SEC to find that Switzer was not liable under Section 10(b) for trading on material nonpublic information he overheard at a track meet). See also Anderson, Greed & Envy, supra note 20, at 22-23.

⁶¹ Dirks v. SEC, 463 U.S. 646, 662 (holding that the test is whether the insider "personally will benefit, directly or indirectly, from his disclosure. Absent some personal gain, there has been no breach of duty to stockholders [by the tipper]. And absent a breach by the insider, there is no derivative breach [by the tippee]"). See also SEC v. Maxwell, 341 F. Supp. 2d 941, 948 (S.D. Ohio 2004) (no liability where insider tipped his barber because there was not benefit to the insider).

⁶² United States v. O'Hagan, 521 U.S. 642, 655 (1997). Indeed, Justice Thomas pointed out that under the current regime, "were the source expressly to authorize its agents to trade on the confidential information—as a perk or bonus perhaps—there would likewise be no § 10(b) violation." Id. at 689 (Thomas, J., concurring in the judgment in part and dissenting in part).

⁶³ Henry G. Manne, Insider Trading and Property Rights in New Information, 4 CATO J. 933, 938

⁶⁴ 17 C.F.R. § 240.10b5-1 (2014).

⁶⁵ See, Anderson, Anticipating a Sea Change, supra note 20, at 365.

⁶⁶ See RESTATMENT (SECOND) OF TORTS § 525-6 (1977).

Section 10(b) liability requires "knowing or intentional misconduct." 67 However, in promulgating Rule 10b5-1(b) in 2000, the SEC seems to have effectively dropped the requirement of scienter for insider trading liability. The prelude to Rule 10b5-1 explains that the rule "defines when a purchase or sale constitutes trading 'on the basis of' material nonpublic information in insider trading cases brought" under Section 10(b) and SEC Rule 10b-5.68 Rule 10b5-1(b) then goes on to define the mental-state requirement that trading be "on the basis of" material nonpublic information as demanding nothing more than "awareness" (or mere possession) of material nonpublic information while trading. The result is that an insider who sells shares for no other reason than to pay for her husband's emergency heart transplant is nevertheless liable for insider trading if she happened to be in possession of material nonpublic information at the time of the trade. As Professor Allan Horwich puts it, "the SEC may have indulged in some linguistic legerdemain . . . arguably transforming a phrase that connotes a deliberate act . . . into something less."69 Indeed, one commentator goes so far as to suggest that Rule 10b5-1 converts insider trading into a strict liability offense,70 which is clearly inconsistent with the Supreme Court's announcement that though Section 10(b) was designed as a catch-all, "what it catches must be fraud."71

A second important way in which the current enforcement regime is over-inclusive under the fraud-based model is its proscription of issuer-licensed insider trading. I shall define what I mean by "issuer-licensed insider trading" in Section III below and explain why its proscription is inconsistent with a fraud-based theory of insider trading liability in Section IV below. For now I simply offer the promissory note that such trading is not deceptive and cannot therefore be coherently articulated as a form of Section 10(b) fraud.

D. Current Regime Is Irrational

The incoherence of the current regime combined with the vague and undefined elements of the offense leaves market participants guessing, and markets abhor uncertainty. The result is that the above-described dysfunction in the current regime often undermines many of the concrete

⁶⁷ Ernst & Ernst v. Hochfelder, 425 U.S. 185, 197 (1976). *See also* Carol B. Swanson, *Insider Trading Madness: Rule 10b5-1 and the Death of Scienter*, 52 U. KAN. L. REV. 147, 155 (2003) (noting the Supreme Court "has repeatedly asserted that [Rule 10b-5] liability involves deceptive acts").

⁶⁸ 17 C.F.R. § 240.10b5-1 (2014).

⁶⁹ Allan Horwich, *The Origin, Application, Validity, and Potential Misuse of Rule 10b5-1*, 62 Bus. Law 913, 921 (2007).

⁷⁰ See Swanson, supra note 67, at 151-52.

⁷¹ Chiarella v. United States, 445 U.S. 222, 234-35 (1980).

market-related values the regulation of insider trading purports to promote. The current regime is therefore irrational.

The problem of insider trading compliance for issuers offers just one example. Faced with ambiguity in the law, issuers are unable to design effective compliance programs that identify and preempt only illicit trades. The only way for firms to protect against civil and criminal liability has been to adopt overbroad compliance programs. For example, issuers often impose overly restrictive pre-clearance standards for employee trading and excessively long blackout periods during which employees are precluded from trading altogether. However, I have argued elsewhere that these "play-it-safe" compliance policies come at a heavy price to firms in terms of corporate culture, cost of compensation, share liquidity, and cost of capital.⁷²

First, ambiguity in the law forces compliance officers conducting preclearance interviews to view with skepticism employee claims that they are not trading the firm's shares based on material nonpublic information. Such scrutiny of motives can lead to resentment on the part of employees. This resentment may in turn undermine the spirit of cooperation and mutual respect that is so important to a strong compliance culture, and to the firm's profitability. Issuers could try to avoid this internal tension by turning the pre-clearance process over to outside counsel, but such outsourcing is expensive, and these costs are ultimately born by the shareholder.

Second, it is common for corporate insiders to receive a large portion of their compensation in firm shares.⁷⁵ But the liquidity of these shares affects their value. Any restrictions the firm places on its employees' ability to monetize these shares will devalue them as compensation, forcing the company to issue more shares to employees to achieve the same remunerative effect.⁷⁶ This increased cost of compensation is, again, passed along to the firm's shareholders in lost share value.⁷⁷

Third, employees often account for a large proportion of an issuer's outstanding shares.⁷⁸ So it stands to reason that significant restrictions on employee trading will decrease liquidity in the firm's shares. This decrease

⁷² See generally, Anderson, Paradox of IT Compliance, supra note 20.

⁷³ *See id.* at 291.

⁷⁴ See, e.g., Joan MacLeod Heminway, Materiality Guidance in the Context of Insider Trading: A Call for Action, 52 Am. U. L. REV. 1131, 1180-82 (2003).

⁷⁵ See, e.g., Henderson, supra note 7, at 508 (Between 1999-2008, "the average public company executive earned more than half her total pay in the form of stock options or restricted stock.").

⁷⁶ *Id.* at 509-10.

⁷⁷ See Heminway, supra note 74, at 1174-77.

⁷⁸ See Jesse M. Fried, *Insider Trading Via the Corporation*, 162 U. PA. L. REV. 801, 804 (2014) (citing a study suggesting that directors and officers own an average of twenty-four to thirty-two percent of a given firm's equity).

in liquidity will, in turn, increase the cost of capital to the firm.⁷⁹ Once more, these additional costs are ultimately born by shareholders in the form of lost share value.

I have referred to these problems together as composing the paradox of insider trading compliance for issuers.⁸⁰ Vagueness in the law of insider trading combined with the threat of harsh sanctions creates a perverse incentive to adopt inefficient compliance programs that can poison a corporate culture, decrease liquidity, increase cost of capital, and ultimately undermine shareholder value. The current regime is irrational to the extent that it undermines these important values which it purports to protect and promote.

All of this is to say that the current insider trading enforcement regime would be unjust, incoherent, irrational, and in desperate need of reform even if all the insider trading that is currently regulated were socially harmful and morally impermissible. In other words, even if the "it's just not right" objector to insider trading turned out to be correct, our shared commitment to justice, internal coherence, and rationality in the law would still suggest that the current insider trading enforcement regime be reformed. It turns out, however, that one of the forms of insider trading that is currently regulated, what I refer to as issuer-licensed insider trading, is harmless and morally permissible. In the next two sections I shall argue that liberalizing the current regime to legalize issuer-licensed insider trading would solve many of its current problems, but that accepting this reform will turn crucially on ethical justifications.

III. PROPOSED REFORM: EXPRESSLY AUTHORIZE ISSUER-LICENSED INSIDER TRADING

There is no single solution to the dysfunction that pervades the U.S. insider trading enforcement regime. I am, however, convinced that one reform would dramatically improve clarity, coherence, and rationality in the law, and it could be accomplished entirely through SEC rulemaking, without the need to amend Section 10(b). The proposed reform is the express authorization through SEC rulemaking of issuer-licensed insider trading. This modification to the current regime would permit issuers, at their discretion, to allow their employees to trade the firm's shares based on

⁷⁹ See Yakov Amihud & Haim Mendelson, Asset Pricing and the Bid-Ask Spread, 17 J. FIN. ECON. 223, 249 (1986) (noting that the greater a security's liquidity, the lower the expected return demanded by investors, which decreases the firm's cost of capital).

⁸⁰ See Anderson, Paradox of Compliance, supra note 20, at 295.

material nonpublic information so long as the following conditions are satisfied: 81

- (1) the insider submits a written plan to the firm that details the proposed trade(s);
- (2) the firm authorizes that plan;
- (3) the firm has previously disclosed to the investing public that it will permit its employees to trade on the firm's material nonpublic information through these plans when it is in the interest of the firm; and
- (4) the firm discloses ex post all trading profits resulting from the execution of these plans.

It is important to note that this proposed reform would not affect the current regulation of issuer-proscribed insider trading (i.e., classical insider trading where the insider trades based on material nonpublic information despite the fact that the issuer has prohibited such trading), nor would it affect the current regulation of trading under the misappropriation theory as defined above. As I explain below, both issuer-proscribed insider trading and misappropriation trading are economically harmful, morally wrong, and should continue to be proscribed.⁸²

So how would authorizing issuer-licensed insider trading improve matters? The reform does not offer a statutory definition of insider trading, nor does it solve the problem of vagueness in insider trading's common-law elements. It does, however, bring relative certainty to a large, perhaps the largest, class of potential insider traders, namely issuers and the corporate insiders whom they employ. Issuers who are concerned about the risk of civil and criminal exposure for their trading and the trading of their employees could take refuge in the safe harbor offered by the reform. With the proper disclosures in place, they could be certain that any authorized

⁸¹ I first proposed the following reform in *Anticipating a Sea Change*, *supra* note 20, at 380-81. *See also* Anderson, *Paradox of Compliance*, *supra* note 20, at 308.

A strong argument can be made that, based on dicta from *Chiarella* and *O'Hagan*, issuer-licensed insider trading is already permitted under Section 10(b). *See* Anderson, *Anticipating a Sea Change*, *supra* note 20, at 385-86. *See also*, Henderson, *supra* note 7; Saikrishna Prakash, *Our Dysfunctional Insider Trading Regime*, 99 COLUM L. REV. 1491, 1515-20 (1999). Given, however, that the SEC would almost certainly challenge any such interpretation—and at least some lower courts would back them—no firm would (or should) take the risk of testing the theory absent clear guidance from the SEC.

trades in the firm's shares would not run afoul of the Section 10(b) insider trading regime. Corporate insiders themselves would enjoy the same certainty with any authorized trade, regardless of whether they possess material nonpublic information. In addition, this increased certainty for issuers and insiders would decrease the risk of abuse of regulatory and prosecutorial discretion.

This reform would also resolve the paradox of insider trading compliance for issuers.⁸³ By availing themselves of the safe harbor, firms would no longer feel compelled to preclude otherwise harmless trades for fear they might incur civil or criminal penalties. The firm's business judgment, not fear of regulatory scrutiny, would determine trading decisions and the liquidity of employee shares. If a firm rejects an insider's trading request and the employee trades anyway, then any regulatory action for insider trading would now be consistent with the firm's interests. In short, the proposed reform would virtually eliminate the heavy costs of insider trading compliance for issuers under the current regime, and it would bring the interests of issuers and regulators into complete alignment.

But there is a problem. The main objection to any reform package that includes an express safe harbor for issuer-licensed insider trading will be that such trading "is just not right!" Unless this challenge is confronted directly, and in the ethical terms in which it is posed, the proposed reform cannot hope to succeed.

IV. WHY ISSUER-LICENSED INSIDER TRADING IS MORALLY PERMISSIBLE

For the reasons stated in Section II, the current insider trading regime would be unjust even if the conduct it sought to proscribe was itself morally impermissible. But, at least with respect to issuer-licensed insider trading, the proscribed conduct *is* morally permissible from the standpoint of the two principal moral theories informing Western liberal jurisprudence—consequentialism and deontology. It remains to sketch out some arguments to this conclusion, though there is no space here to develop them in detail.

To inquire into the moral permissibility of insider trading with any precision, it is first necessary to posit a legal regime that does not proscribe it. This allows us to separate our analysis of the morality of insider trading from the more general questions of when (if ever) it is morally permissible to violate the law, or when (if ever) it is permissible to violate the prearranged rules of a cooperative scheme.⁸⁴ The analysis below therefore

⁸³ This paragraph summarizes points made in Anderson, Paradox of IT Compliance, supra note 20, at 308-10.

⁸⁴ Professor Stuart Green, for example, has suggested that insider trading is morally wrong because it cheats the established market rules. STUART P. GREEN, LYING, CHEATING, AND STEALING: A

assumes a regime that does not regulate any form of insider trading and then answers the question of whether, in such a regime, there would be ethical reasons for imposing such regulation.

Consequentialism identifies the rightness or wrongness of acts or rules with the goodness or badness of their consequences. There are two crucial elements to any consequentialist moral theory. First, the theory must define what is good. Defining the good provides the consequentialist with the criterion "for ranking overall states of affairs from best to worst from an impersonal standpoint." Second, once the good is defined, consequentialism simply holds that the morally right action will be that which brings about the state of affairs that maximizes that good. 86

Utilitarianism, which defines the good in terms of happiness or preference satisfaction, is by far the most prominent consequentialist theory. When utilitarianism is applied to the context of law, it tests the utility of legal *rules* and *principles* (rather than specific acts).⁸⁷ The principle of rule utilitarianism may be articulated as follows: "[T]he rightness or wrongness of an action is to be judged by the goodness and badness of the consequences of a rule that everyone should perform the action in like circumstances."88

Though there are certainly affinities between the economic analysis of law and rule utilitarianism (both are concerned with maximization strategies),⁸⁹ the former is not grounded in the latter, and the two approaches to law can sometimes conflict.⁹⁰ Nevertheless, economic analysis can be an effective tool for testing the social utility of certain conduct. And, indeed, it is fair to say that the economic analysis of insider trading offered by Manne and others takes us much of the way toward

MORAL THEORY OF WHITE COLLAR CRIME 235-40 (2006). Such arguments are just not helpful when the question is whether there are moral reasons for regulating insider trading the first place.

⁸⁵ Introduction to CONSEQUENTIALISM AND ITS CRITICS 1, 1 (Samuel Scheffler ed., 1988).

⁸⁶ Id

 $^{^{87}}$ $\,$ J.J.C. Smart & Bernard Williams, Utilitarianism For & Against 9 (2008).

⁸⁸ Id

Some see the link between utilitarianism and the economic analysis of law. *See, e.g.*, Kim Lane Scheppele, "*It's Just Not Right*": *The Ethics of Insider Trading*, 56 LAW & CONTEMP. PROBS. 123, 150 (1993) (suggesting that utilitarianism is "the moral theory that underwrites the law and economics perspective").

⁹⁰ See, e.g., POSNER, supra note 10, at 403 ("the economic approach is neither deducible from nor completely consistent with [utilitarianism]"). Deviations will occur when rules promoting market efficiency fail to maximize overall social welfare—though rational choice theorists would argue this will rarely occur. For example, conflicts will arise where economic and moral conceptions of happiness differ (e.g., preference versus hedonistic, relative versus non-relative) and maximization differ (e.g., pareto efficiency versus the principle of utility). Moreover, recall that utilitarianism is just one form of consequentialism. If the good is defined as something other than happiness (think, e.g., perfectionist theories of the good), then it is easy to see how these approaches to law may come into conflict. See, e.g., T. HURKA, PERFECTIONISM, 55-60 (1993).

explaining when insider trading is and is not morally permissible on utilitarian grounds.

The economic consequences of insider trading have been hotly debated.⁹¹ The most commonly cited economic benefits of insider trading include increased stock price accuracy,⁹² real-time information to the markets⁹³ and to management,⁹⁴ its market-smoothing effect,⁹⁵ and its use as an efficient means of compensation.⁹⁶ The most commonly-cited economic harms associated with insider trading are that it increases the bid-ask spread set by market makers⁹⁷ and that it undermines investor confidence in the

⁹¹ For a more thorough summary of this debate, see Anderson, Greed & Envy, supra note 20, at 7-17

⁹² See, e.g., Carlton & Fischel, supra note 6, at 868 ("If insiders trade, the share price will move closer to what it would have been had the information been disclosed.").

⁹³ Insider trading allows a company's insider's assessments of endogenous information to be reflected in its market price on a daily basis without the costs and delays associated with public filings and releases. *See id.* ("Through insider trading, a firm can convey information it could not feasibly announce publicly because an announcement would destroy the value of the information, would be too expensive, not believable, or—owing to the uncertainty of the information—would subject the firm to massive damage liability if it turned out ex post to be incorrect.").

Real-time reflection of a company's information through its stock price can also inform upper management. For example, Manne pointed out that insiders often trade on nonpublic information concerning their company problems (fraud or other issues) that have not yet been brought to the attention of management. Any corresponding change in the stock price may raise a "red flag" to management and allow them to address the problem before it worsens. *See* Henry G. Manne, *Insider Trading: Hayek, Virtual Markets, and the Dog that Did Not Bark*, 31 J. CORP. L. 167, 174-83 (2005).

As Professor Stephen Bainbridge explains, "[a]ccurate pricing benefits society by improving the economy's allocation of capital investment and by decreasing the volatility of security prices. This dampening of price fluctuations decreases the likelihood of individual windfall gains and increases the attractiveness of investing in securities for risk-averse investors. The individual corporation also benefits from accurate pricing of its securities through reduced investor uncertainty and improved monitoring of management's effectiveness." Stephen Bainbridge, *Insider Trading: An Overview*, ENCYCLOPEDIA OF LAW AND ECONOMICS 777-78 (Boudewijn Boukaert and Gerrit De Gees eds., 2000). *See also*, MANNE, *supra* note 1, at 80-90.

⁹⁶ Insider trading can serve as an attractive form of compensation for company employees that encourages innovation and entrepreneurship at relatively little cost to the shareholders. *See, e.g.*, Henry G. Manne, *Entrepreneurship, Compensation, and the Corporation*, 14 Q. J. Austrian Econ. 3, 17-18 (2011). As Manne explains, if a "service performed is or can be one which gives access to valuable information [that can be monetized], less of other forms of compensation must be paid in order to secure the same amount of the service." Henry G. Manne, *Insider Trading and the Law Professors*, 23 VAND. L. REV. 547, 579 (1970).

Where insider trading is unchecked by regulation, there is the concern that market makers will be forced to increase the spread between their bid and ask prices to protect against adverse selection by insiders. *See, e.g.*, Harold Demsetz, *Perfect Competition, Regulation, and the Stock Market*, ECONOMIC POLICY AND THE REGULATION OF CORPORATE SECURITIES 1, 14 (Henry G. Manne ed., 1969). As one commentator explains, "The essence of the adverse selection model is that because of order imbalances and the difficulty of sustaining a liquid market only with matching, a liquidity provider has to transact with his own inventory and thus bears the risk of consistently buying 'high' from and selling 'low' to insiders." Stanislav Dolgopolov, *Insider Trading and the Bid-Ask Spread: A Critical Evaluation of Adverse Selection in Market Making*, 33 CAP. U. L. REV. 83, 98 (2004).

markets,⁹⁸ both of which increase the cost of capital to firms.⁹⁹ There is also the concern that insider trading creates perverse incentives by giving employees an opportunity to profit from their company's bad news.¹⁰⁰

Starting with issuer-proscribed and misappropriation insider trading, the utility calculus is relatively straightforward. It is fair to assume that neither an issuer (in the case of issuer-proscribed insider trading) nor the source of the information (in the case of misappropriation trading) would demand a commitment from the would-be trader not to trade unless they expected an all-things-considered net harm would result from such trading. If insiders or misappropriators were permitted to trade despite their commitment not to do so, then issuers and sources would be forced to incur these costs. Add to this the broader disutility of undermining the socially beneficial practice of promise-making in the corporate context, ¹⁰¹ as well as the general market costs associated with a higher bid-ask spread, moral hazard, and dampened market confidence, and the calculus suggests that these forms of insider trading are morally wrong on utilitarian grounds. ¹⁰²

But the landscape changes dramatically once the focus shifts to issuerlicensed insider trading. Here, the issuer's own all-things-considered calculus has determined that such trading will result in a net benefit to the firm. By retaining the power to approve or reject proposed plans, the issuer itself controls the risks. For example, it must be presumed that when an issuer licenses a trade its calculus has already factored in any potential increases in cost of capital and decreased share liquidity that might result from an increased bid-ask spread. Retaining the discretion to approve or reject trades in advance also eliminates the risk of perverse employee incentives. Additionally, insofar as issuer-licensed insider trading actually benefits firms (for, again, if it did not, then it would not be licensed), the practice should reinforce rather than undermine market confidence. 103 Finally, any utility calculus must factor the saved costs of enforcement and compliance where such trading is not regulated. 104 In sum, when these considerations are taken together, there can be little doubt that issuerlicensed insider trading is morally permissible on utilitarian grounds.

⁹⁸ See, e.g., United States v. O'Hagan, 521 U.S. 642, 658 (1997) ("Although informational disparity is inevitable in securities markets, investors likely would hesitate to venture their capital in a market where trading based on misappropriated nonpublic information is unchecked by law.").

⁹⁹ See, e.g., Dolgopolov, supra note 97, 100-01 ("a greater bid-ask spread is likely to have an adverse effect on the security's liquidity, the firm's cost of capital, and its stock price").

¹⁰⁰ See, e.g., Saul Levmore, Securities and Secrets: Insider Trading and the Law of Contracts, 68 VA. L. Rev. 117, 149 (1982).

¹⁰¹ See Anderson, Greed & Envy, supra note 20, at 29.

¹⁰² See id. at 29-30.

¹⁰³ See id. at 41-42.

For example, the current regime's U.S. regulation of issuer-licensed insider trading has given rise to the paradox of compliance outlined above in Section III; a regime that permits such trading would resolve this paradox and align the interests of issuers and regulators.

Ultimately, however, the principal moral objection to issuer-licensed insider trading in our own public political discourse—and therefore the principal obstacle to reform in the U.S.—is not utilitarian. If it were, then the preceding economic considerations would probably be enough to win the public's hearts and minds over for liberalization. Rather, the principal objection to issuer-licensed insider trading is "consequences be damned, it's just not right!" Such objections are driven by *deontological* moral intuitions sometimes expressed in the mantra, "let justice be done though the heavens fall!" 105

Deontology is a duty-based moral theory. 106 It does not judge the moral quality of an act by its consequences, but by its motive, and whether that motive complies with the absolute commands of moral law. 107 Perhaps the most recognized articulation of a deontological moral theory is found in "end-in-oneself" formulation of Immanuel Kant's categorical imperative: "Act so that you treat humanity...always as an end and never as a means only."108 In other words, one should never use another person for purposes that person would reject. Kant's categorical imperative gives expression to our shared commitment to the idea that, as free and equal rational agents, we all enjoy an absolute moral worth that cannot be traded or purchased in the name of private expedience or social welfare. It also offers an explicit theoretical articulation of our common sense notions of justice and fairness. To the extent Manne's student's (and the general public's) objection that insider trading is "just not right" is motivated by such deontological commitments, they draw on deeply rooted and widely shared values. Such objections cannot be answered by talk of pareto efficiencies, and they will not simply go away if dismissed or ignored. They must be explicitly confronted on their own terms if they are to be overcome.

Once again, it is helpful to separate the analysis of issuer-proscribed and misappropriation trading from issuer-licensed insider trading. One need not look beyond the promise the insider makes not to trade on the firm's material nonpublic information to conclude that issuer-proscribed insider trading violates Kant's categorical imperative. Such trading necessarily treats the promisee (the firm and its shareholders) solely as the means to an end (the use of the company's material nonpublic information for trading profits) that the promisee has expressly rejected. If an issuer

¹⁰⁵ See 2 ENCYCLOPEDIA OF PHILOSOPHY 343 (Paul Edwards ed., 1967).

 $^{^{106}\,}$ The word "deontology" finds its root in the Greek word "deon," meaning duty. Peter A. Angeles, Dictionary of Philosophy 60 (1981).

¹⁰⁷ For a more complete summary of deontological moral theory and its application in this context, see Anderson, *Greed & Envy*, supra note 20, at 33-43. Much of what follows summarizes arguments first made in *Greed & Envy*.

¹⁰⁸ IMMANUEL KANT, FOUNDATIONS OF THE METAPHYSICS OF MORALS 47 (Lewis White Beck trans., 2d ed. 1990) (1785).

publicly affirms that it does *not* allow its insiders to trade on material nonpublic information, then issuer-proscribed insider trading also treats other traders in that firm's shares as mere means because they have presumably priced its shares based on the expectation that such trading is not permitted. Misappropriation trading is morally impermissible for the same reasons. The misappropriator gains the material nonpublic information on which she trades by making the promise not to trade. In breaking that promise and trading, the misappropriator uses the source of the information as the means to an end the source has expressly rejected.

Things look very different when we turn to issuer-licensed insider trading. Such trading does not deceive or violate a promise to the firm because the firm has licensed the trade. And there is no deception of others who trade in the firm's shares because the issuer has disclosed that it allows its employees to trade based on material nonpublic information and the profits earned by such trading. Such disclosures give counterparties adequate notice and opportunity to price the issuer's shares accordingly. In sum, all interested parties to the issuer-licensed insider's trading (both the issuer, the counterparty, and the broader market) are fully informed in advance of the trade and are therefore respected as ends in themselves and *not* treated as mere means.

These deontological considerations (in addition to others there is no space to develop here¹⁰⁹) deprive the opponent of legalizing issuer-licensed insider trading of any reason-based justification in terms of fraudulent deception, justice or fairness. And they offer another reason for reform namely that a whole class of insider trading that incurs criminal liability under our current regime would morally innocent if unregulated. But the moral duties of justice and fairness do not exhaust the ethical landscape. In fact, many journalists, politicians, and judges object to insider trading as a manifestation of the vice of greed. As Professors Charles Cox and Kevin Fogarty put it, "[t]he wave of major insider trading prosecutions has been taken by many as a symptom of cancerous greed on Wall Street."110 Professor Bainbridge quotes a California state court's claim that insider trading is "a manifestation of undue greed among the already well-to-do, worthy of legislative intervention if for no other reason than to send a message of censure on behalf of the American people."111 And Manhattan U.S. Attorney Michael Garcia announced that "[g]reed is at work" when the feds unveiled the Galleon Group insider trading case in 2007, celebrating it

¹⁰⁹ For a more complete exposition of these arguments, see Anderson, Greed & Envy, supra note 20, at 33-43.

¹¹⁰ Charles C. Cox & Kevin S. Fogarty, Bases of Insider Trading Law, 49 OHIO St. L.J. 353, 353 (1988).

Stephen M. Bainbridge, Research Handbook on Insider Trading 23 (2013) (quoting Friese v. Super. Ct., 36 Cal.Rptr. 3d 558, 566 (Cal. App. 2005)).

as "the biggest insider trading bust" since the 1980s.¹¹² But is policing greed a legitimate end of our criminal justice system? And if it were, would the criminalization of issuer-licensed insider trading be an effective means?

V. GREED IS NOT GOOD, BUT IT SHOULDN'T BE ILLEGAL

"Greed is all right, by the way. I want you to know that. I think greed is healthy. You can be greedy and still feel good about yourself." Ivan Boesky spoke these words in a 1986 commencement address for U.C. Berkeley's Haas School of Business. He would surrender to federal authorities on charges of insider trading and other securities violations just a few short months later. The fictional Gordon Gekko paraphrased Boesky's remarks when he proclaimed that "Greed . . . is good" in Oliver Stone's sensational exposé on insider trading, *Wall Street*. Boesky and Gekko are, of course, wrong. Greed is, by definition, not good.

Aristotle explained why greed is a vice—it is the contrary of the virtue of generosity. Generosity is the "mean concerned with the giving and taking of wealth." The generous person is one who will "both give and spend the right amount for the right purposes . . . and do this with pleasure." He does not honor wealth for its own sake, but nevertheless acquires it "for the sake of giving." By contrast, the greedy are "shameful love[rs] of gain" who "go to excess in taking, by taking anything from any source." In their pursuit of wealth for its own sake, they are prepared to go to "great efforts and put up with reproaches."

There is no question that the facts of many insider trading cases reflect the grasping smallness of character Aristotle describes. But while acts of greed are always harmful to the actor's character, they need not be harmful to others. In fact, greedy acts will typically only directly harm others where they are also unjust or unfair. We have, however, already considered and rejected the argument that issuer-licensed insider trading is unjust or unfair. So, if issuer-licensed insider trading is regarded as unethical because it

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GASPARINO, supra note 21, at 104.
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See STEWARD, supra note 47, at 261.

¹¹⁴ *Id*.

¹¹⁵ *Id.* at 265.

WALL STREET (20th Century Fox 1987).

The following argument summarizes and in some cases expands on points I first made in *Greed & Envy, supra* note 20, at 48-53.

ARISTOTLE, THE NICOMACHEAN ETHICS 89 (Terence Irwin trans., 1985) (350 B.C.E).

¹¹⁹ *Id*.

¹²⁰ *Id*.

¹²¹ Id. at 92.

¹²² *Id.* at 93.

reflects the character flaw of greed—it is a completely self-regarding wrong. In other words, it harms no one but the person who engages in it.

There are at least three points to be made here. First, though issuer-licensed insider trading may sometimes be motivated by greed, it needn't always be so motivated. For example, the generous issuer-licensed insider trader may seek gain to help a family member get through college, to pay for a friend's expensive medical treatment, or to engage in some other form of philanthropy.¹²³ Thus, any legal prohibition of issuer-licensed insider trading based on greed would be over-inclusive. Moreover, since there are many other opportunities for obscene profit-making in our free-market system (including other ways to profit by trading on material nonpublic information),¹²⁴ it would also be woefully under-inclusive.

Second, even if a good argument could be made that allowing issuer-licensed insider trading will tempt citizens to the vice of greed, this is insufficient justification for its criminalization. This justification is paternalistic and moralistic in nature. It would place issuer-licensed insider trading into the same class as now-disfavored moralistic laws against sodomy, adultery, and same-sex marriage. Such laws violate the longstanding tenet of Anglo-American justice and jurisprudence expressed in John Stuart Mill's harm principle: "[T]he only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. *His own good, either physical or moral, is not a sufficient warrant.*" 125

Finally, if we are going to get into the business of criminalizing vicious character traits, perhaps we should scrutinize the motives of the would-be regulators of insider trading. Some have suggested that the criminalization of even issuer-licensed insider trading is best explained as the political exploitation of the vice of envy shared by many in the electorate over the vast disparity in wealth between the hard-working denizens of Main Street and the "fat cats" of Wall Street. As Bainbridge puts it, absent evidence of investor injury, any anger the public feels "over insider trading . . . has nothing to do with a loss of confidence in the integrity of the market, but instead arises principally from envy of the insider's greater access to information." So understood, the prohibition of insider trading "is not so much an antifraud rule as a law against easy

¹²³ For example, Rajat Gupta, an ex Goldman Sachs Director who was convicted of insider trading as part of the Galleon Group sting, offered evidence of his extensive philanthropy at the sentencing phase of his trial. *See, e.g.*, Peter Lattman, *Push for Leniency as an Ex-Goldman Director Faces Sentencing*, N.Y. TIMES (Oct. 17, 2012, 7:03 PM), http://dealbook.nytimes.com/2012/10/17/insentencing-memos-two-views-of-gupta/?_r=0.

¹²⁴ See Section II above (noting that, e.g., trading based on material nonpublic information acquired by eavesdropping or luck is not proscribed by the current Section 10(b) insider trading enforcement regime).

JOHN STUART MILL, ON LIBERTY 22 (2d ed. 1859) (emphasis added).

Bainbridge, State Law Fiduciary Duties, supra note 21, at 1242.

money."¹²⁷ Professor Donald Langevoort adds that, on this view, which "smacks a bit of populism, of envy and resentment directed at the privileges of class and wealth," insiders "should be content with their paychecks and not overreach for profits."¹²⁸

Envy is generally regarded as one of the worst vices. This is because the perverse goal of envy is the destruction of what is good solely to see another deprived of it.¹²⁹ Aristotle describes envy as the perfect vice because it cannot admit of moderation. According to Aristotle, envy's name alone (like "murder") implies badness. 130 And Kant describes it simply as the "hatred of human beings." ¹³¹ In addition, the philosopher John Rawls points out that the prevalence of envy in a society can have devastating effects on social stability. Not only are the envious prepared to do things that make both themselves and the objects of their envy worse off "if only the discrepancy between them is sufficiently reduced," but when the objects of envy realize they have been targeted, "they may become jealous of their better circumstances and anxious to take precautions against the hostile acts to which [others'] envy makes [them] prone."132 Thus, at a minimum, we need to be careful that any criminalization of issuer-licensed insider trading is not motivated by the vice of envy, and is not therefore giving expression to the worst in ourselves and our society.

CONCLUSION

Nothing in this Article is intended as an indictment of the economic analysis of law or its implications for the regulation of insider trading. The work of Manne and others on the economics of insider trading has been absolutely crucial to our understanding of the stakes in play—both financial and moral. I concede that Manne's work constituted the important first step toward insider trading reform. My aim here has been to point out that the economic critique of the U.S. insider trading enforcement regime has gone about as far as it can go. Those who hold the keys to reform continue to answer the economic critique with "it's just not right!" arguments. The result has been an absence of constructive discourse. Parties to the controversy use different vocabularies and therefore continue to speak at cross-purposes. In the meantime, a hopelessly unjust and dysfunctional

¹²⁷ Cox & Fogarty, supra note 110, at 360.

Donald Langevoort, Fraud and Insider Trading in American Securities Regulation: Its Scope and Philosophy in a Global Marketplace, 16 HASTINGS INT'L & COMP. L. REV. 175, 182 (1993).

¹²⁹ See Jeanne L. Schroeder, Envy and Outsider Trading: The Case of Martha Stewart, 26 CARDOZO L. REV. 2023 (2005).

ARISTOTLE, supra note 118, at 45.

¹³¹ IMMANUEL KANT, THE METAPHYSICS OF MORALS 206 (Mary Gregor ed. & trans., Cambridge Univ. Press 1996) (1785).

JOHN RAWLS, A THEORY OF JUSTICE 532 (1971).

regime is perpetuated by default. If any change is to occur, the proponents of the current regime must be confronted directly, and with their own ethical vocabulary. Winning the "hearts and minds" of the average American (and therefore the politicians and judges who represent them) is the final step to insider trading reform, and this step can only be made by taking ethical arguments seriously. I have sketched out some of these arguments here, but there is much more to be done.

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QUIS CUSTODIET WALL STREET? RELYING ON PRIVATE GOVERNANCE IN FINANCIAL MARKETS

Edward Peter Stringham*

INTRODUCTION

Who should govern Wall Street? Most people assume that government must set the rules for financial markets, and that legislators and administrative agencies will design and enforce rules to enhance markets. Law and economics pioneer Henry Manne, however, did not take it as an item of faith that regulations would always enhance, or were even necessary for the existence of, markets. Manne's research showed that regulations are often ill-conceived, necessarily require selective enforcement, and have various unintended consequences. His analysis also discussed how markets have many built in, but underappreciated, mechanisms to constrain

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¹ University of Chicago professors Rajan and Zingales maintain that "market transactions require a central authority to enforce them promptly and at low cost" and "politics—for better or worse—lays the foundations for markets, and thus for prosperity." *See* RAGHURAM RAJAN & LUIGI ZINGALES, SAVING CAPITALISM FROM THE CAPITALISTS: UNLEASHING THE POWER OF FINANCIAL MARKETS TO CREATE WEALTH AND SPREAD OPPORTUNITY 158-59 (Princeton U. Press 2004); Raghuram Rajan & Luigi Zingales, *Saving Capitalism from the Capitalists*, New York: Crown Business Vol. 2121 27, http://www.savingcapitalism.com/capintro.pdf. Such thinking is also behind those who have advocated for more government regulation of markets with the 2002 Sarbanes-Oxley Act (also known as the Public Company Accounting Reform and Investor Protection Act) and the 2010 Dodd-Frank Act (also known as the Wall Street Reform and Consumer Protection Act).

² A report, sponsored by former New York City Mayor Michael R. Bloomberg and Senator Charles Schumer, in which 50 financial services CEOs were interviewed and hundreds of others were surveyed, found that burdensome government regulations are making American financial markets much less competitive than they could be. McKinsey & Company, Sustaining New York's and the Us' Global Financial Services Leadership 17 (McKinsey and Company 2007). Bloomberg and Schumer state, "The findings are quite clear: First, our regulatory framework is a thicket of complicated rules, rather than a streamlined set of commonly understood principles, as is the case in the United Kingdom and elsewhere. The flawed implementation of the 2002 Sarbanes-Oxley Act (SOX), which produced far heavier costs than expected, has only aggravated the situation, as has the continued requirement that foreign companies conform to U.S. accounting standards rather than the widely accepted—many would say superior—international standards." *Id.* at ii. Respondents told McKinsey that compared to London, New York is lacking on the following issues: "government and regulators are responsive to business needs," "fair and predictable legal environment," and "attractive regulatory environment." *Id.* at 65. Policymakers appear to have gotten us into this problematic situation by overestimating the efficacy of government rules and regulations and ignoring many costs.

market participants. For example, in his work on mergers and the market for corporate control, Manne discussed the worry that managers, the agents, will not act in the interests of the owners, the principals. Manne highlighted that an important constraint on potentially delinquent managers is the possibility of hostile takeovers. An underperforming firm's low share prices can act as a signal to others to buy the firm and restructure it, especially with new management. Although the takeover can be hostile to underperforming management, it comes to the rescue of the shareholders. A policy implication of Manne's analysis is that regulations that make hostile takeovers more difficult will end up interfering with an important market constraint.

Manne's work was prescient and has many policy implications for today. He covered some areas such as insider trading in depth in academic journals and touched on many other topics in popular outlets like the Wall Street Journal.3 Manne states, "my critics assure their readers that the SEC 'good guys' always catch the 'bad uns' but such an assumption may be nothing more than wishful thinking."4 This article highlights some of Manne's insights and relates them to some of the things I learned while researching the origins and development of securities markets for my book from Oxford University Press, Private Governance.⁵ My research found that in each of the world's first major stock markets, 17th century Amsterdam, 18th century London, and 19th century New York, government officials did not have a good understanding of economics or finance and viewed much of the trading as forms of gambling and refused to enforce contracts in them.⁶ Despite the unenforceability of these contracts, brokers engaged in sophisticated contracts including short sales, forward contracts, and options. These markets were made possible, not by government oversight, but because of what Manne would refer to as "internal policing"⁷ or a "private security system," and what I will refer to as private governance.9

 $^{^3}$ See Henry G. Manne, The Collected Works of Henry. G. Manne, Vol. 1, 2, & 3 (Liberty Fund, 1996).

⁴ 2 HENRY G. MANNE, THE COLLECTED WORKS OF HENRY. G. MANNE 317 (Liberty Fund, 1996).

 $^{^{5}\,}$ Edward Peter Stringham, Private Governance: Creating Order in Economic and Social Life (Oxford U. Press, 2015).

⁶ *Id.* at 39.

MANNE, supra note 4, at 178.

⁸ MANNE, *supra* note 4, at 179.

⁹ Economists often describe exchange-created rules as the microstructure of markets. *See* MAUREEN O'HARA, MARKET MICROSTRUCTURE THEORY (Blackwell, 1995); Paul Mahoney, *The Exchange as Regulator*, 83 VA. L. REV. 1453, 1457 (1997) (referring to the role of the exchange as regulator); Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L. J. 2359, 2370 (1998) (outlining how such competition encourages exchanges to create rules that investors trust).

Dutch stockbrokers relied on informal mechanisms, like the discipline of repeat dealings, and on reputation mechanisms. English and American stockbrokers augmented these informal mechanisms when they transformed coffeehouses and taverns into stock exchanges to create and enforce rules. These clubs had entrance requirements and rules about the conduct of members, and they eventually adopted rules about listed companies. Securities and Exchange Commission style regulation came much later, and its one-size-fits-all "solutions" actually interfered with the completion among providers of private governance. As we can learn from the approach of Henry Manne, we should not assume that government regulation enhances markets.

I. THE HISTORY OF PRIVATE RULES IN FINANCIAL MARKETS¹⁰

In Amsterdam, London, and New York government officials considered most trading in stock markets as a form of gambling. In a 1791 letter to Thomas Jefferson, James Madison wrote, "stock jobbing drowns every other subject. The coffee house is an eternal buzz with the gamblers." On April 10, 1792 the New York state legislature passed "An Act to Prevent the Pernicious Practice of Stock-Jobbing" which declared the unenforceability of all but the simplest contracts:

All contracts, written or verbal, public or private, made after the passing of this act, for the sale or transfer, and all wagers concerning the prices, present or future, of any certificate or evidence of debt, due by or from the United States, or any separate state, or any share or shares of the stock of the bank of the United States, or any other bank, or any share or shares of the stock of any company established or to be established, by law of the United States or any separate state, shall be, and all such contracts are hereby declared to be absolutely null, void, and of no effect. ¹²

American officials were simply following the lead of Dutch and English officials who had passed similar ordinances declaring the unenforceability of most contracts.¹³ Despite the unenforceability of contracts, brokers

This section draws from Stringham, supra note 5, and Edward Peter Stringham, Private Governance: The Role of Private Rules and Regulations for Creating Modern Stock Markets. FINANCIAL HISTORY MAGAZINE, 15-19 (2016).

¹¹ Letter from James Madison to Thomas Jefferson (Jul. 10, 1791), *in* 20 THE PAPERS OF THOMAS JEFFERSON 616-17 (Julian P. Boyd ed., 1982).

Reprinted from Walter Werner & Steven T. Smith. WALL STREET, 199 (Columbia U. Press. 1991).

After a large price decline the Dutch East India company in 1608, officials blamed short sellers and believed that outlawing it would prevent further price drops. Officials passed ordinances against short sales, prohibiting selling "in blanco" (selling something you don't own) as well as "windhandel" (trading in wind). The new ordinances required that only owners of shares could make sales and that sellers had to actually transfer their shares within a month. *See* Hermann Kellenbenz, *Introduction* to

continued trading anyway. The contracts were made possible, not because of government, but because of private rules and regulations that emerged from the market.

A year after the famous Buttonwood Tree Agreement of 1792, where twenty-four brokers pledged to deal with each other, an association of merchants created The Tontine Tavern and Coffee House "for the purpose of a Merchants Exchange with 203 subscribers at \$200 each." In 1794 one commentator described it:

The Tontine Tavern and Coffee House is a handsome, large brick building; you ascend six or eight steps under a portico, into a large public room, which is the Stock Exchange of New York, where all bargains are made. Here are two books kept, as at Lloyd's, of every ship's arrival and clearing out. This house was built for the accommodation of the merchants, by Tontine shares of two hundred pounds each. It is kept by Mr. Hyde, formerly a woolen draper in London. You can lodge and board there at a common table, and you pay ten shillings currency a day, whether you dine out or not. 15

They adopted a "Constitution and nominations of the subscribers to the Tontine Coffee-House" as early as 1796, and by 1817, brokers created a more formal membership club and trading venue, the New York Stock and Exchange Board. The 1817 "Rules to be adopted and observed by the 'New York Stock and Exchange Board'" were quite simple and included "fines for non-attendance at the calling of the Stocks," and how "any member refusing to comply with the foregoing rules may have a hearing

JOSEPH DE LA VEGA, CONFUSION DE CONFUSIONES ix (Barry E. Supple ed., Hermann Kellenbenz trans., The Kress Library of Bus. and Econ., 1957).

In the following decades official prohibitions continued; additional ordinances were passed in 1621, 1623, 1624, 1630, 1636, and 1677 that outlawed all but the simplest transactions. See Pit Dehing & Marjolein 't Hart, Linking the Fortunes: Currency and Banking, 1550-1800, in A FINANCIAL HISTORY OF THE NETHERLANDS 37 (Marjolein 't Hart et. al. eds., 1997); Peter Garber, Tulipmania, in Speculative Bubbles, Speculative Attacks, and Policy Switching 55, 55 (Robert P. Flood & Peter M. Garber eds., Cambridge: MIT Press, 1994); Jan De Vries & Ad van der Woude. The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500-1815 (Cambridge U. Press, 1997).

In addition to passing rules restricting stockbrokers, the government all but outlawed the formation of new joint stock companies in 1720 with the passing of the Bubble Act. A 1734 bill, "to prevent the infamous Practice of Stock-jobbing," also banned options, forward contracts, and margin trading, and government animosity toward stock traders persisted for well over a century. RON HARRIS, INDUSTRIALIZING ENGLISH LAW: ENTREPRENEURSHIP AND BUSINESS ORGANIZATION, 1720-1844 255 (Cambridge U. Press, 2000).

- Werner & Smith, *supra* note 12, at 216.
- ¹⁵ See W. HARRISON BAYLES, OLD TAVERNS OF NEW YORK, 360 (Frank Allaben Genealogical Co., 1915).

Edmund C. Stedman & Alexander N. Easton, *History of the New York Stock Exchange*, in The New York Stock Exchange: Its History, Its Contribution to National Prosperity, and Its Relation to American Finance at the Outset of the Twentieth Century 62 (E.C. Stedman ed., 1905).

before the Board, and if he shall still persist in refusing, two-thirds of the Board may declare him no longer a member." Members added different resolutions over the years, and by the 1860s, in addition to blacklisting those who did not follow through with their contracts, to make sure everyone was proper they had rules prohibiting "indecorous language" (suspension for a week), fines for "smoking in the Board-room, or in the ante-rooms" (five dollars), and fines for "standing on tables or chairs" (one dollar). In the 1860s they shortened the name to the New York Stock Exchange, had an initiation fee of \$3,000, and soon after had seats that could be bought and sold 19. Entrance requirements and an initiation fee screened for reliability up front and acted as the equivalent of a bond that would be forfeited by anyone who broke the rules. The London Stock Exchange as a rule-enforcing club has a surprisingly similar history. 20

II. PRIVATE LISTING AND DISCLOSURE REQUIREMENTS

In addition to having rules of membership, they started having rules about the securities that could be listed. Letting any entity, including likely fraudulent ones, approach investors had the potential to create a tragedy of the commons situation where the fraudulent ventures crowded out the good. To deal with this problem, they adopted listing and disclosure requirements to make the market more transparent. By 1865 the New York Stock Exchange had two lists of securities, the regular list and the secondary list. The first list would be called at the "First Board" in the morning session that members had to attend. To be on the first list, companies had to apply by giving their "applications for the placing of Stocks on the regular list,

¹⁷ *Id.* at 64.

¹⁸ HENRY HAMON, NEW YORK STOCK EXCHANGE MANUAL: CONTAINING ITS DIFFERENT MODES OF SPECULATION: ALSO, A REVIEW OF THE STOCKS DEALT IN ON 'CHANGE 26-29 (John F. Trow, 1865); CONSTITUTION AND BY-LAWS OF THE NEW YORK STOCK EXCHANGE, 31-33 (Martin England, 1869).

¹⁹ *Id.* at 12.

In 1812 the London Stock Exchange adopted its first formal rulebook stating that their resolutions were "but an attempt (the first indeed that has ever yet been made in this House) to reduce into a regular method the rules and regulations, by which so very important a class of society is to be governed." See RULES AND REGULATIONS ADOPTED BY THE COMMITTEE FOR GENERAL PURPOSES OF THE STOCK-EXCHANGE, 10 (Stephen Couchman Printers, 1812). Although the Committee said some disputes can be settled within the exchange using "the known Laws of the Land," they added that "many others (which, form their nature and extent, preclude the possibility of forming any general laws on the subject, so as to meet every contingency) may also be adjusted by the known custom and practice of the market." Id. The Exchange had rules in the following categories: Admissions (14 resolutions), Bargains (10 resolutions), Clerks (8 resolutions), Committee (18 resolutions), Failures (12 resolutions), Partnerships (1 resolution), Puts and calls (1 resolution), Passing of tickets (3 resolutions), Quotation of prices (5 resolutions), Settling days (3 resolutions). Id. at 15-43.

shall be made directly to the Board, with a full statement of capital, number of shares, resources, &c."21

Over time they adopted more explicit listing requirement and required companies to maintain a transfer agency and registrar that is approved by the Exchange (New York Stock Exchange, 1914, Article XXXIII, Sec. 1); to obtain permission from the Committee on Stock before issuing initial or subsequent shares (Article XXXIII, Sec. 2, Sec. 5); and to comply with various rules of the New York Stock Exchange Governing Committee, which had the authority to suspend dealings or remove a company's shares from the exchange (Article XXXIII, Sec. 4).²² By the 1920s, the Exchange required various reports and disclosures from companies.

Although each listing and disclosure requirement involves costs to listing firms, they can bestow certain benefits to investors, and in turn listing firms. One can think of the Exchange as solving a sort of collective action problem between individual investors and firms. A listing firm nominally bears the costs of compliance, but it willingly does so because the rules increase the value of its stock. If investors value transparency through listing or disclosure requirements, an exchange can require them. That means individual investors need not visit a company's offices if they know that a stock exchange and auditors have reviewed the company's When investors benefit from disclosure, exchanges have an books. incentive to require it. Manne explains that "[t]his also helps us understand why stock exchanges, even before the SEC, required periodic financial disclosures to shareholders . . . Periodic disclosure of financial statements confirmed to the investing public that the price level of shares, reached by trading, was reliable. Both exchanges and companies had an interest in this."23

III. COMPETITION AMONG PROVIDERS OF PRIVATE GOVERNANCE

By World War I, the New York Stock Exchange became the most important stock exchange in the world. But the success of the New York Stock Exchange was not inevitable. Adopting stricter rules had the potential to attract more market participants or it had the potential to push them away to less strict competitors. The New York Stock Exchange always had to compete for business and faced competition from the Curb Market and other exchanges in New York and the regional exchanges in Philadelphia and Boston. Investors also could have focused on: "the Coal

²¹ HENRY HAMON, *supra* note 18, at 16-17 (John F. Trow, 1865).

²² CONSTITUTION OF THE NEW YORK STOCK EXCHANGE AND RESOLUTIONS ADOPTED BY THE GOVERNING COMMITTEE: WITH AMENDMENTS TO FEBRUARY 1914, 65-67 (Searing & Moore Co., 1914).

MANNE, supra note 4, at 383.

and Iron Exchange, the Coffee Exchange, the Cotton Exchange, the Maritime Exchange, the Metal Exchange, the New York Insurance Exchange, the New York Produce Exchange and the Leaf Tobacco Board of Trade"²⁴ to name a few. Some were ultimately outcompeted. The advantage of competition, however, is each exchange had to try to make its market as attractive as possible, and those that did a better job prospered.

The system of private regulation made their market more attractive by screening firms, creating listing requirements, and requiring disclosure for investors. The requirements were not decided by government, but by the market participants themselves who win or lose based on the attractiveness of their venue. For good or bad, nobody can prevent all instances of fraud, but the listing and disclosure requirements made fraud more difficult and precluded most fly by night firms. Although the stricter rules of the New York Stock Exchange can be considered the Cadillac of listing standards, an advantage of markets is that not everyone is required to buy a Cadillac, and market participants only opted into New York Stock Exchange's stricter rules if they consider them value-adding. If firms or investors found an exchange's listing or disclosure requirements too onerous or not appropriate for a certain type of form, they could opt into venues with different rules. By providing extra assurances to investors, the New York Stock Exchange increased the demand for its market and made investing in stocks more attractive and safe.

Although most politicians would have us believe that advanced markets are impossible without government enforcing the rules of the game, the history over hundreds of years has shown otherwise. This form of private governance has been tremendously important for centuries, but its mechanisms are often not easily seen and are often forgotten. When buyers do not have to worry about counter-party default risk in a stock purchase, the time they spend thinking about the problem is minimal. Behind the scenes, however, the stock exchange spent hours making sure people who are permitted to trade in a market can actually deliver what they promise.

When the Securities Act and the Securities Exchange Act were implemented in 1933 and 1934, they actually mandated many of the disclosure requirements that the New York Stock Exchange had already adopted. Some government regulations were not extremely burdensome for firms that had already chosen to comply with stricter New York Stock Exchange regulations, but they were burdensome for many smaller markets and the societal-wide mandates crowded out or interfered with many of the private regulations. Advancing the economic theory of regulation, Manne discusses how after the Securities and Exchange Commission, the New York Stock Exchange sought to influence it to restrict the small regional

²⁴ JERRY MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES. VOL. 2. FROM J.P. MORGAN TO THE INSTITUTIONAL INVESTOR 6 (M.E. Sharpe, 2002).

exchanges.²⁵ Manne says that rather than making the market more competitive, the Securities and Exchange Commission helps enforce cartel arrangements.²⁶

IV. SUMMARY AND THOUGHTS

The first stock markets created the potential for anyone to invest in large companies, and that in turn helped finance enterprise in the New World and the industrial revolution itself. The regulations that made these markets possible came, not from the government, but from clubs like the Tontine Tavern and Coffee House and the New York Stock and Exchange Board. The more that these providers of private governance made their markets transparent and prevented customers from being defrauded, the more that these providers of private governance, and members of society, gained. As Stedman and Easton state:

If the Exchange had been nothing more than a meeting-place for buyers and sellers of securities, and the borrowers and lenders of funds based on securities—a huge automatic dial to register vibrating values, and a legalized centre of speculation—it would even then have been worthy of an important place in the national annals. But though created only for these functions, it has come to discharge another and more striking one. In doing so it has formed that connection with the country's development which may be reckoned the most value feature in its history.²⁷

Putting important financial decisions into the hands of the private sector, rather than the hands of the state, had important implications for the world. By the time of Henry Hudson four hundred years ago, gone were the days that one needed to approach government to finance exploration to the new world. Instead, Hudson was financed by the Muscovy Company in London and subsequently the East India Company in Amsterdam. Modern New Yorkers can also thank the Dutch West India Company for founding the settlement New Amsterdam. Stock markets in Amsterdam, London, and New York turned their cities into leading financial centers that brought rapid economic development in their nations and the world. As Robert Wright, Peter Rousseau and Richard Sylla point out, well functioning capital markets, particularly secondary securities markets, provide an important explanation of where and when economic development occurs.²⁸

MANNE, supra note 4, at 362.

²⁶ *Id.* at 365.

²⁷ Stedman & Easton, *supra* note 16, at 16, 18.

²⁸ See Peter L. Rousseau & Richard Sylla, Emerging Financial Markets and Early U.S. Growth,
42 EXPLORATIONS IN ECON. HIST. 1, 26 (2005); ROBERT E. WRIGHT, THE WEALTH OF NATIONS
REDISCOVERED: INTEGRATION AND EXPANSION IN AMERICAN FINANCIAL MARKETS, 1780-1850 (2002).

Modern capitalism owes its existence to stock markets and the private rules and regulations that made them possible.

When rules listing and disclosure requirement are valuable to investors, providers of private governance have incentives to provide them. Brokers from nineteenth century New York and twentieth century London realized they could make their market more attractive by screening firms, creating listing requirements, and requiring disclosure for investors. The requirements were not decided by the government but by the market participants. Those that failed to adopt good rules or that adopted burdensome rules were at a competitive disadvantage, and those that adopted good rules succeeded. Rather than being "a race to the bottom" in which anything goes, the New York Stock Exchange worked to make its market attractive and only put its stamp of approval on firms that warrant trading.

Where private regulators must always cater to investor wants, government regulators receive no market feedback about the desirability of their rules. I think Stigler is right when he states, "grave doubts exist whether if account is taken of cost of regulation, the SEC has saved the purchasers of new issues one dollar." A major disadvantage of relying on a monopolized rules and regulations is that the government, unlike market participants, does not receive market feedback or have to pay its ill-conceived or costly rules and regulations. A few years ago, New York City Mayor Michael R. Bloomberg and Senator Charles Schumer were correct to point out that federal regulations are making American markets less competitive and that the regulation is increasingly burdensome.

Manne also highlights another very worrisome trend. He states that "Mr. Spitzer has introduced the world to yet a new form of regulation, the use of criminal law as an in terrorem weapon to force acceptance of industry-wide regulations. These rules are not vetted through normal authoritative channels, are not reviewable by any administrative process, and are not subject to even minimal due-process requirements." Home Depot founder and former New York Stock Exchange board member

 $^{^{29}}$ $\,$ George J. Stigler, The Citizen and the State: Essays on Regulation 87 (1975).

Manne, *supra* note 4, at 394-395. Consider the outright threats such as Elliot Spitzer's prosecution of the New York Stock Exchange and members for board approved salaries, which likely led the New York Stock Exchange to move away from a member-owned club. Although the case helped make a name for the prosecutor and aspiring politician, a man of loose morals, the New York Supreme Court eventually threw out the charges. In the interim, chairman Richard Grasso and many important members of the board resigned, and the New York Stock Exchange merged with the Archipelago Exchange to become a for-profit rather than a member-owned club. Today, exchanges can regulate themselves to a large degree, but they have to get permission from the Securities and Exchange Commission for many rules. *See* Jenny Anderson, *Stock Exchange's Former Chief Wins Court Battle to Keep Pay*, N.Y. TIMES, Jul. 2, 2008, at A1.

Kenneth Langone stated, "We're being strangled by regulation . . . We don't understand in America how bad regulation has become." ³¹

In contrast to government regulators, providers of private governance must continually pass the market test. If investors, the customers of private governance, want to do business in the safest settings, they can do business with firms at New York Stock Exchange or NASDAQ, or if investors want to opt out of those rules and trade elsewhere they can. Moving back to a system of regulatory competition would allow investors to opt into sets of rules and regulations that they consider best and competing stock exchanges provide that option. Competing stock exchanges help provide an off-the-shelf package of rules for corporate governance and the costs and benefits of that package become internalized within each exchange. In the exact same way that a competitive market for computers gives us far superior technology than if government attempted to run Silicon Valley, the same was, and can be, true with rules and regulations provided through the market.

³¹ See Jesse Solomon, Ken Langone Blasts Regulation, Spitzer and the New York Times, CNN MONEY (May 14, 2014, 11:05 PM), http://buzz.money.cnn.com/2014/05/14/billionaire-ken-salt-comments/. See also Josh D. Wright & Todd Zywicki, Three Problematic Truths About the Consumer Financial Protection Agency Act of 2009, 1 LOMBARD STREET 1 (2009); Keith Hylton, Larry Ribstein, Paul Rubin, & Todd Zywicki, The Balancing of Markets, Litigation, and Regulation, 7 J. OF LAW, ECON., & POL'Y 351 (2010).

FINDING – AND FIXING – FLAWS IN FINANCIAL MARKET MICROSTRUCTURE

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Abstract: The automation of financial trading has dramatically reduced the cost of transactions, but at the same time has raised persistent questions about the effect of automation on market fairness, stability, and economic efficiency. This paper argues that there are indeed flaws in market microstructure, but they are not the sort that are easily addressed by regulation. Instead, technological innovation—especially the introduction of temporally buffered trading—is likely to provide a satisfactory resolution of existing problems. Temporal buffering gives market participants the option of trading more slowly, while limiting their exposure to predation by higher-speed traders. Three varieties are considered: short random delays (as used by ParFX), short fixed delays (as used by IEX), and short batched auctions (as proposed by Budish, et al).

Contrary to a common misunderstanding, an "efficient market" cannot mean the fastest possible market, because speed incurs real resource costs. Temporal buffering allows market participants to choose their preferred speed, and improves market efficiency in two ways: it avoids wasteful expenditures on high-speed "racing," and it reduces the transient information asymmetries that otherwise tend to be ubiquitous in high-speed markets. Regulators' priorities should be to: (1) avoid creating barriers to constructive innovations, (2) provide a regulatory framework that allows markets operating at different speeds to co-exist, and (3) rely on competition to sort out which innovations are useful and which are not.

INTRODUCTION

In the 21st century, automated algorithmic trading by computers has become the dominant method of exchanging securities, commodities, derivatives, and currencies in major markets around the world. Many more trades take place, at dramatically lower costs per trade, than in the days when human traders stood on a trading floor—or even when human traders sat at computer terminals and controlled them in real time. There is little doubt that automated trading has brought some substantial improvements to the efficiency of financial markets.

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At the same time, many participants, regulators, and observers of financial markets have a sense that something has gone seriously awry: that the explosive growth of high-frequency trading (HFT) is somehow excessive, costly, unfair, and/or destabilizing. There are at least two persuasive indications that HFT entails some loss of efficiency. The first indicator is the amount of real resources being invested in the arms race for zero latency. Tens of billions of dollars are spent to achieve miniscule temporal advantage in trading. Ships repeatedly cross the oceans laying fiber optic cables, each time stretching them a little bit tighter in order to render the previous cables obsolete. Where possible, traders will erect microwave towers, despite their relative inefficiency, to beat the traders who are using fiber optics, in which the speed of light is slightly slower.¹

The second indicator is the amount of effort being made on the defensive side of the arms race. Large banks, mutual fund operators, and other sophisticated institutional traders try various methods to insulate their own transactions from the high frequency traders. If the high frequency traders were merely providing a useful service to the broader market, one would not expect large investors to go to such great lengths to avoid being serviced.

Several ideas for changing the rules have been discussed. Without a coherent explanation of exactly what is wrong, however, it can be very difficult to develop a promising remedy.

The object of this paper is to offer one such explanation: that the digitization of the trading infrastructure, in combination with ubiquitous but fleeting information asymmetries, has stimulated a dramatic expansion of racing. By racing, I mean the wasteful expenditure of resources in a contest to trade ahead of other market participants; racing—like its cousin, queuing—is an example of a directly unproductive profit-seeking (DUP) activity whose costs erode the gains from trade that otherwise would be available to participants in the market.

The paper also offers a specific remedy: the optional use of randomizing temporal buffers in the order flow. By slightly slowing the pace of trading, such buffers will allow market-data dissemination processes to saturate (i.e., will allow information asymmetries to dissipate) a little bit faster than order execution processes, so that price discovery and trading can operate more efficiently in an environment with more symmetrical information. By decoupling order flow from market-data flow, this remedy should also help reduce the likelihood of chaotic feedback instabilities in automated trading markets.

¹ The best empirical paper documenting this arms race is by Eric Budish, Peter Cramton, & John Shim, *The High-Frequency Trading Arms Race: Frequent Batch Auctions as a Market Design Response*, 130 Q. J. ECON. 1547 (2015).

Racing and its associated costs have received a good deal of attention in other contexts, particularly the race-to-fish in certain fisheries.² Most analyses of financial markets appear to overlook the inefficiency of racing, however, in part due to a widespread misunderstanding of the efficient market hypothesis (EMH). Because the EMH emphasizes the speed with which information is incorporated into prices, many people tend to confuse speed with economic efficiency, thinking that faster must always be better. This is nonsense, of course. Real-world markets can always be made to operate a little faster, for a cost, but they can never be instantaneous. As the speed of trading approaches instantaneity, the cost will approach infinity.

It follows that the optimum speed of trading—the efficient speed, in the ordinary economic sense of efficiency—must be finite. Therefore, in order to have a complete understanding of what an economically efficient market looks like, we need to be able to explain what it means for a market to be trading too fast, as well as too slow. And we need to know what conditions might cause a market to operate at the wrong speed and how such conditions might be corrected so that the market can find its optimum speed.

I. RECOGNIZING RACING AND RETHINKING EFFICIENCY

One way or another, markets clear. Ideally, they clear at low transaction cost by discovering a price acceptable to the buyer and the seller, with the price determining how the gains from trade will be divided between them. When, for whatever reason, the price mechanism is not functioning ideally, other mechanisms will assert themselves to close the gap between buyer and seller. Price controls on gasoline produced some spectacular *queues* in the United States in the 1970s. Economic regulation of airlines produced extra legroom, extra elbow-room (i.e., empty seats), flying piano bars, and other forms of extravagant *non-price competition*. Trade barriers have fostered bribery, even to the point of measurably degrading GDP in some nations; a vast literature on *rent-seeking*³ contains many more examples of DUP⁴ that waste real economic resources even as they appear to be privately profitable. *Racing* is one of those DUP activities, and it is commonplace. We see it in currency runs, land and

² For a dramatic example see the first season of Discovery Channel's "Deadliest Catch." Later seasons feature an ITQ (Individual Tradable Quota) type of fishery management, and racing ceased to be such an important factor.

³ See generally Gordon Tullock, The Welfare Costs of Tariffs, Monopolies, and Theft, 5 W. ECON. J. 224 (1967); Anne O. Krueger, The Political Economy of the Rent-Seeking Society, 64 AM. ECON. REV. 291 (1974).

⁴ See generally Jagdish N. Bhagwati, Directly Unproductive, Profit-Seeking (DUP) Activities, 90 J. POL. ECON, 988 (1982).

mineral rushes, patent races, fisheries with short and frantic seasons, and a variety of other situations where temporal priority is rewarded.

Both racing and queuing dissipate economic rents by wasting resources, but in racing, the waste can be more difficult to spot. When we see people waiting hours in line to buy gasoline, the real-resource losses are obvious. When commuters arrive at work early just to get a parking space it is not immediately obvious, but is nonetheless true, that mispriced parking is causing a net welfare loss. It is all too easy to mistake racing for productive effort. In still other contexts, racing may be described as a "panic," but that label is misleading. Rational people will still trample each other to flee an inferno, or a collapsing currency.

Commercial fisheries provide some of the most instructive examples of racing. At the level of biologically and economically sustainable yields, the market price for fish is often much higher than the cost incurred in catching them. The difference represents an economic rent on the resource; but capturing that rent, without destroying it, is a challenge. In the absence of property rights in free-swimming fish, unrestricted competition will cause a fishery to collapse. Short fishing seasons is one common mechanism for preventing a collapse, but the response tends to be a more rapid expenditure of fishing efforts—larger and faster boats, larger nets, etc.—in a race against the clock until a frantic equilibrium is achieved.⁵

The overcapitalization of a fishery—excess investment in fast boats and other capital that may be used only a couple of weeks out of the year—is so obviously wasteful that fishery managers may impose "gear restrictions" and other regulatory impediments in an attempt to reduce the waste. But when one factor of production is constrained, extra effort is channeled into another factor; the race continues on whatever margin is available until it is no longer worth it, the rents are exhausted, and the market clears. Note that competition in the race-to-fish will drive profits to zero, but that emphatically does *not* mean that it will drive costs to zero. The deadweight loss is real: the waste is not that someone is making a profit but, rather, that no one is.

But if racing is wasteful, then it should not exist in an ideally functioning market; there must be an underlying market failure that causes the misallocation of resources. Often that market failure is an absence of well-defined property rights, as in a common property resource. Indeed, the classical "tragedy of the commons" can be seen as an example of racing: the tragedy is not that there are too many sheep on the town commons, but that the sheep are turned out too early, eating the grass shoots before they

⁵ The Environmental Defense Fund, among others, has documented the dynamics of fisheries collapsing under traditional management regimes, and the advantages of using property rights instead. See How to Turn Around the Fishing Crisis: By giving Fishermen Long-term and Secure Rights, We make Sustainability a Priority, ENVIRONMENTAL DEFENSE FUND, https://www.edf.org/oceans/how-turn-around-overfishing-crisis.

have a chance to grow.⁶ Overgrazing and overfishing are both symptoms of the same underlying problem and solving that problem is the key to avoiding the loss. The enclosure movement in Great Britain, and barbed wire in the U.S., solved overgrazing; Individual Tradable Quota (ITQ) management plans, by creating property-like shares in a fishery, are well on their way to solving overfishing.

In fisheries that succumb to racing we don't fret about whether faster boats have an "unfair advantage," nor do we complain that the fishery is "rigged." Some people may violate the rules, and we take pains to enforce them, but no one is under the illusion that better enforcement of rules will solve the underlying problem. Whether it is fair or unfair, lawful or unlawful, racing is economically disastrous because it destroys wealth for everyone involved—those who win the race, as well as those who lose it.

A. Racing the News

Racing in financial markets bears a superficial resemblance to racing in fisheries. Indeed, the reported investments in high-speed data centers, fiber-optic linkages, and other accoutrements of high-frequency trading bear an uncanny resemblance to the overcapitalization that one sees in poorly regulated fisheries. The investments are costs incurred in the pursuit of profit, but, to the extent that they are unproductive, they erode the economic rents (i.e., the returns on investment) that would otherwise be available in the market. However, in the context of HFT, the remedy must be different because the underlying market failure is different. The cause of racing in financial markets is not a failure of property rights, but, rather, an asymmetrical distribution of market-relevant information.

Information asymmetry is a well-understood market failure,⁷ albeit one that, in the context of financial trading, has a history of some controversy. This arises, in part, from the tension between two views of information as an economic good. One view is that information asymmetries, whatever their origin, cause unfairness and inefficiency; much of our regulatory system is designed to ensure that public information is available to everyone at the same time. The other view is that those who trade on information are improving price discovery and thereby helping make the market more efficient; their profit is simply the reward they receive for the service they are providing. From this latter perspective the majority of market participants appear to be free-riding on those few who make the needed investment to produce accurate information and, through trading, to share it.

⁶ Garrett Hardin, *The Tragedy of the Commons*, 102 SCIENCE 1243, 1244-45 (1968).

⁷ See generally George A. Akerlof, The Market for "Lemons": Qualitative Uncertainty and the Market Mechanism, 84 O.J. ECON. 488 (1970).

Over several decades this argument has not been settled, most likely because there is merit in both points of view. Information is valuable, but, once produced, can be copied for free. It cannot be characterized neatly as a pure public good nor as a pure private good. Our legal institutions that deal with the ownership of information (e.g., the patent system, copyright and fair-use doctrine, etc.) tend to strike a balance between these two extreme views of information as an economic good. Financial markets have their own complicated set of contractual and legal institutions for handling information.⁸

In all of these fields, the digital revolution has upset the pre-existing balance between the private-good and public-good models of information and has forced a reexamination of institutions that govern the use of information. Thus we should not be surprised that the digitization of trading has dramatically altered the way that information is processed and rewarded in financial markets.

B. Finding Inefficiency in an EMH-Efficient Market

The speed of automated trading certainly appears to be a good thing, in that it brings us closer to the ideal of a market that almost instantaneously reflects all of the available information. So how can we possibly reconcile the Efficient Market Hypothesis (EMH)⁹ with the claim made here that racing is a manifestation of inefficiency? The simple answer is that these are two different uses of the same word.

The phrase "efficient market" as used in the EMH typically has a static meaning. The EMH states that markets quickly reach an equilibrium, but people forget that it is the equilibrium that is efficient—not necessarily the quickness of reaching it. We tend to take it for granted that faster information incorporation translates into superior resource allocation, and that the profits made by news traders therefore represent compensation earned for a productive activity. But it is not necessarily so. The speed at which a market's prices incorporate new information is, in part, the product of competition among traders to profit by trading early on breaking news. Real resources are expended in that competition, and, to the extent that they are devoted to unproductive racing, they represent a real loss.

The typical statement of the EMH glosses over this point, implicitly treating instantaneity as if it were an optimum. As Eugene Fama stated it, "we should note that what we have called *the* efficient markets model . . . is the hypothesis that security prices at any point in time 'fully reflect' *all*

⁸ For an early description of how information markets and security markets are intertwined, see HENRY MANNE, INSIDER TRADING AND THE STOCK MARKET (New York: The Free Press, 1966).

⁹ Eugene F. Fama, Efficient Capital Markets: A Review of Theory and Empirical Work, 25 J. FIN. 383 (1970).

available information."¹⁰ Or as Burton Malkiel put it, "[t]he logic of the random walk idea is that if the flow of information is unimpeded . . . prices fully reflect all known information."¹¹

But, of course, prices do not change instantaneously. To see where economic inefficiency may be hiding in an otherwise EMH-efficient market, consider an alternative, informal paraphrasing of the hypothesis:

If t is the last moment in which a particular bit of information has no trading value because no one knows it yet, and t+I is the earliest moment in which it has no trading value because now everyone effectively knows it, then t and t+I are very close together and getting closer all the time

This restatement captures the essence of the EMH, for which there is extensive empirical confirmation in the literature, but also makes it clear that the EMH says nothing about what happens in between time t and t+1. However brief that interval may be, there is (at least today) a great deal of trading that happens within it. Because information during that interval is not symmetrically distributed and prices are not in equilibrium, we should not expect trading during that interval to be efficient in the usual economic sense, nor should we expect empirical tests of the market's static efficiency to be able to identify a dynamic inefficiency of the sort that racing represents.

Today t and t+1 may be only microseconds apart, but by one important measure—the latency/jitter ratio—they are farther apart than ever. We will come back to that concept later in the paper. For now, suffice it to say that high-frequency trading thrives, and exacts its toll, within this ephemeral realm. Markets that appear EMH-efficient are nonetheless bleeding billions of dollars of value through the temporal interstices that are opened up by the digitization of trading.

The information asymmetries that drive this inefficiency arise because news does not break instantaneously. Those who learn it first may profit by placing orders to buy or sell securities, later unwinding their position after prices have adjusted. News traders may expend real resources in an attempt to surf the leading edge of any bit of breaking news. Nice traders—those who have some exogenous reason to trade, rather than any particular news—will widen bid-ask spreads, withdraw temporarily from a turbulent market, or otherwise take defensive action in response to the heightened risk of being on the wrong end of a trade. ¹² This is the lemon effect: the classic description of a market impaired by information asymmetries.

¹⁰ Id. at 388.

Burton G. Malkiel, The Efficient Market Hypothesis and Its Critics, 17 J. ECON. PERSP. 59, 59 (2003).

This terminology comes from Fischer Black. Initially he distinguished "news traders" from "noise traders" (unfinished working paper, personal communication, 1994), and then changed this to

At the very short time scales in which computer programmed, high-frequency trading takes place, another complication arises. Some high-frequency trading programs may examine the flow of the trading data itself and trade on the news it contains—essentially racing the tape. This is feasible because the dissemination of market news and the processing of market orders use the same digital technology. Both processes have the same "relaxation time," and are therefore strongly coupled. The net effect can be destabilizing as trading programs attempt to outrun each other in the direction of any perceived trend, or else defensively withdraw causing liquidity to evaporate. The "flash crash" of May 6, 2010, did not appear to be a panic, nor (because it so quickly rebounded) was it simply a rapid adjustment to a new equilibrium; it may in part have been a manifestation of market instability associated with high-frequency racing of market data.

Of course, it remains true that a market could not function without news traders. But those who spend real resources to learn in a microsecond what everyone will know, for free, in a millisecond are not performing a service. Those resources are directed not at creating real value but at redistributing value. The distinction above, between trades that takes place at equilibrium prices and those that take place "between the ticks," is an artificial one; in reality there is a continuum that is not so easily parsed. Even so, at very short time scales, we can infer that the benefits of price discovery become vanishingly small while the risks of costly and destabilizing racing become large. For this reason, trading strategies that depend upon very high speed are more likely to be associated with inefficient racing than those that occur at lower speed.

Before looking more closely at the high-frequency trading, however, it will be helpful to go through an example that illustrates (because so many doubt it) exactly how a news trade can be presumably profitable and yet unambiguously inefficient.

C. The Helicopter & the Drilling Rig

The following example is an actual trade, but not one that took place at high speed. Indeed, the advantage of this trade is that it unfolded over weeks, so that it is easy to see all the moving parts, to examine the motivations of the participants, and to make some judgments about the consequences. The trade took place in 1972 in the stock of Amax Exploration, Inc., which at the time was listed on the Vancouver Stock Exchange.¹³

[&]quot;news traders" vs. "nice traders." See Fischer Black, Equilibrium Exchanges, 51 FIN. ANALYSTS J. 23, 24 (1995).

I learned of the details of this transaction from the helicopter pilot, via personal communication, in 1973. Note that after 1972, the Vancouver Stock Exchange thoroughly reformed its trading systems—

Among Amax's assets was a speculative mineral claim in the Yukon Territory thought to contain recoverable quantities of zinc, copper, and associated minerals. Like many such remote deposits, this staked claim would remain idle until someone determined that it was worthwhile to make the investment in an access road. In the spring of 1972 Amax decided to test the ore deposit, and sent in a crew with a bulldozer that towed a drilling rig.

Learning of this, an equity trader contracted with the helicopter pilot to shadow the drilling crew. Because of the distances involved (satellite phones had not yet been invented), the trader built a radio repeater tower, powered by a generator, in the intervening wilderness. Through the tower, the pilot would be able to reach the trader in Whitehorse, where there was a landline connection to Vancouver. The trader instructed the pilot to hover over the rig and watch the emerging drill core; a high-quality zinc ore would have a characteristic flat-black appearance. On cue, the pilot reported the buy signal: "It looks black to me."

It is not obvious which side of this transaction one would want to be on. The helicopter was expensive; it likely cost more per hour to keep it hovering in the air than it cost to keep the drill bit turning in the ground. ¹⁴ We can only assume that the resulting trade was marginally profitable, after taking into account that the trader would have incurred the same expense hovering over a dry hole (and might then have made some money taking a short position). But the resources expended on the radio link and the helicopter were nonetheless pure waste.

It is true that some information about the ore deposit was incorporated into Amax's stock price a few days earlier than it otherwise might have been. But that information was vastly inferior to what the drilling crew possessed, since they could test the core chemically, measure the thickness of the ore deposit and its overburden, etc. Moreover, having access to that information sooner could not possibly increase the real returns from the mine. Amax could not begin to build a road until the following summer and could not begin mining until the summer after that. Ultimately the net returns to Amax stockholders from developing that site would be diminished not only by the cost of the drilling rig but also by the cost of the helicopter. If the mine had been financed privately there would have been no helicopter; it would have served no purpose. The cost of the helicopter was pure waste, and it was incurred because the expedition was financed on a continuously trading public market that created the opportunity and the incentive to engage in racing.

several times, in fact—so that no implication should be drawn from this discussion regarding the quality of execution today on that particular exchange. The lessons of this story apply to any continuously trading platform.

¹⁴ This was a test hole in a shallow sedimentary deposit—far easier than drilling through hard rock for oil or gas.

Note that competition would be expected to drive excess profits to zero, even among helicopter traders; perhaps it already had. But competition would not drive costs to zero. The fact that traders were not making an excess profit from racing strategies did not mean that there was no problem. The helicopter was still there, the real resource losses were being incurred, and, through the market, the costs were being distributed among those traders who hired helicopters and those who did not. Everyone's combined returns were lower than the returns from an identical venture financed privately or by some racing-proof mechanism. 15

In many respects, the helicopter is a more modern example of Rothschild's pigeon. When Wellington defeated Napoleon at Waterloo in June of 1815, that news briefly had trading value across the Channel on the London Bourse, where the sovereign bonds of all the European powers had been in play ever since Napoleon's escape from Elba 100 days earlier. Baron Nathan Rothschild allegedly received the news in London first, via carrier pigeon from a confederate traveling with Wellington, and he proceeded to make a profit in the market. ¹⁶

Today, news with trading value crosses the English Channel through fiber optic connections. These may soon be obsolete, however, now that an HFT firm has undertaken to construct a slightly faster pair of microwave towers—tall enough to compensate for the curvature of the earth as they reach across the Channel.¹⁷ The race goes on.

II. WATSON'S THUMB AND THE GENESIS OF RUNAWAY RACING

A. The Digitization of Jeopardy!

The previous examples suggest that racing on information asymmetries takes place at slow speeds as well as fast, and that it has been going on for as long as we have had continuous financial trading. If

¹⁵ Note the striking similarities between this trade and the case brought by the SEC against the Texas Gulf Sulfur Company, described in Manne, *supra* note 8, at 51ff. In both cases, the "insider" information consisted of a drill core from a Canadian zinc/copper deposit. Since Amax was traded on a Canadian exchange, however, it was not subject to SEC jurisdiction.

While the story of Rothschild's pigeon has appeared in many sources, its accuracy has recently been disputed. See Brian Cathcart, The Rothschild Libel: Why has it taken 200 years for an anti-Semitic slur that emerged from the Battle of Waterloo to be dismissed? INDEPENDENT (May 3, 2015), http://www.independent.co.uk/news/uk/home-news/the-rothschild-libel-why-has-it-taken-200-years-for-an-anti-semitic-slur-that-emerged-from-the-10216101.html. See also Nathan Mayer Rothschild and 'Waterloo', THE ROTHSCHILD ARCHIVE, https://www.rothschildarchive.org/contact/faqs/nathan_mayer_rothschild_and_waterloo.

¹⁷ Tim Cave & James Rundle, *High-Speed Trader DRW Proposes Thousand-Foot-Plus Tower in Rural England*, WALL STREET JOURNAL (Jan. 4, 2016), http://www.wsj.com/articles/high-speed-trader-drw-proposes-thousand-foot-plus-u-k-tower-1451937343.

information asymmetries are perhaps a mixed blessing, and in any event are ubiquitous and largely unavoidable, and if racing on breaking news has been a feature of financial trading for centuries, then what has changed? What is new and different about automated trading, other than the things—like cost, speed, and accuracy—that seem to be unambiguous technological improvements?

The answer to that question is subtle, but we can get some insight by examining a recent experiment—one that pitted a computer against two humans. In 2011, an IBM computer, nicknamed Watson, appeared in the TV game show Jeopardy!, along with two human Jeopardy! Champions—Ken Jennings and Brad Rutter.¹⁸ Watson was actually a very large custombuilt computer in the back room, with vast databases of information to consult, but no connection to the internet. What IBM and Jeopardy! thought they were testing was the ability of the computer to understand questions posed in ordinary English, and to extract answers from the mostly unstructured database.¹⁹

In the event, Watson performed very well. But it struck many observers that his strongest performance was in pressing the signaling device that gave him the opportunity to respond to a clue. While Jeopardy! host Alex Trebek is reading a clue, the contestants' signaling devices (handheld buttons) are inactive. They become active as soon as the host finishes reading, and the Jeopardy! board lights up to signal to the players that their devices have been activated. The first contestant to press his or her button is given a five-second opportunity to provide a single response. ²⁰ If a contestant pushes the button too soon, however, his button is deactivated for one-quarter of a second, or 250 milliseconds. ²¹

So the first margin on which Jeopardy! contestants compete is the speed with which they press a button. And here is where Watson had a distinct edge. The average male college student, pushing a button in response to a visual stimulus, has a response time of 190 milliseconds. Watson pushed his button using a solenoid that had a response time, or latency, of just 8 milliseconds.

Human contestants have other strategies available to them. Instead of waiting for the light that indicates buzzer activation, they can instead listen to the cadence of the host's voice. Switching to an auditory cue is, by itself, enough to lower the human response time to 160 milliseconds. More importantly, by listening to the host read the clue, humans can anticipate

¹⁸ The IBM Challenge: Day 1 (NBC television broadcast Feb. 14, 2011); The IBM Challenge: Day 3 (NBC television broadcast Feb. 16, 2011).

 $^{^{19}}$ Actually, because this was Jeopardy!, the questions were answers and vice versa . . . but that matters not. We will refer to them as clue and response.

²⁰ B. L. Lewis, *In the Game: The Interface between Watson and Jeopardy!*, 56 IBM J. RES. & DEV. 17.1, 17.3 (2012).

²¹ *Id*.

when he will finish. This strategy will fail when they buzz-in too soon; but it will enable them, some of the time, to beat Watson to the buzzer.

Moreover, it is a strategy that Watson cannot effectively imitate. Listening to the clue, rather than reading it, would be a challenge by itself for a computer. But even if Watson were able to do it well, it would not confer any latency advantage. There is another human in the loop—call him buzzer man—who sits off-camera listening to the host read the clue, and then presses his own button to activate the contestants' devices. His performance is necessarily variable, and there is no reason to think that a computer could mimic him with any greater success than another human could. So Watson's best strategy is to wait for the activation light and then use the raw speed of his solenoid to leave a very small window for his human opponents to shoot for. And his success rate with this strategy was high.

Let us pause here to note that we are not going to be saying anything about the fairness of this Jeopardy! contest. First of all, both IBM and Jeopardy! made it very clear that this was not a real contest but a demonstration, and the reward structure had been changed accordingly. The human contestants understood all of this in advance. Watson's winnings went to charity. Second, keep in mind that the Jeopardy! format had been selected for this demonstration specifically because it presented numerous seemingly insurmountable obstacles for the computer. Watson acquitted himself remarkably well in overcoming these. While he had an advantage in this one aspect of the game, there isn't space here to list all of the ways in which Jeopardy! favored human contestants.

B. Watson, Wharton, & Wilson

So the point of this discussion is not about fairness; indeed, it is not about computers vs. humans at all. We now need to extend the demonstration a little further by doing a thought experiment. What if Brad Rutter were replaced with a second computer—call her Wharton. Suppose that Wharton is not quite as smart as Watson, but she is equipped with a solenoid with a latency of 6 milliseconds. By buzzing in consistently ahead of Watson, Wharton should prevail. Now let's introduce Wilson, a computer who gets a little over half the questions right. But Wilson, with a 4-millisecond solenoid, should be able to shut out both Wharton and Watson.

It is not hard to imagine that this would fundamentally change the character of the contest. Jeopardy! would become much less fun to watch, and not merely because it lacked a "human interest" element. What was once a game of wits would become a game of thumbs.

But why exactly is that? It is because computers are consistent, in a way that humans are not. When humans play Jeopardy!, their individual response time is initially an important competitive edge. But, with a little

practice, everyone achieves an adequate level of competence with the signaling device. Differences in thumb speed do not disappear altogether, but they do tend to fade into the noise, while differences in knowledge, and in the speed of retrieving it, come to the fore.

"Fade into the noise" is the key phrase here. Human performance is variable, and the variability *between* humans is not much greater than the variability in performance of a single human in repeated trials. If I am 5 percent faster than you on average, I will not win every race. I will likely win a majority of races between us, but it might only be 60 out of 100. Some days I will not do my best, or you will. In contrast, if my computer is 5 percent faster than yours, it will beat you every time. Such is the consistency of digital systems: absent some external source of variability, they will produce the same result repeatedly. If computers play Jeopardy! under the same rules that work perfectly well for humans, the result will be a very different, and rather boring, game. Only one of them will ever get the initial opportunity to answer questions, and it will be the one with the fastest solenoid. Innovation and investment will focus on reducing latency; over time, competition will produce ever faster solenoids, but not smarter contestants.

To be clear: the problem is not that computers are too fast. Other things being equal, speed is a good thing. Nor is the problem that humans find themselves at a disadvantage. The problem is that the pre-existing rules of competition, which work well for humans, work very poorly for computers. They place far too great a premium on speed, at the expense of intelligence. Computer systems are characterized not only by a low latency but also by a very low jitter—the variability of latency. That predictability, when combined with Jeopardy!'s rules that favor temporal priority, will reward competitors who invest resources in gaining a speed advantage.

From time to time we change the rules of sports to make a game more interesting, and we could expect Jeopardy! to do the same—to change the rules so as to allow computers to compete on the basis of their ability to answer questions rather than push buttons. What might that change look like? After reading each clue, the responder could be chosen by lot from all those who pushed the buzzer within the first 250 milliseconds. Or, somewhat equivalently, a random delay could be added to the response time of the signaling device. This would introduce a synthetic variability in latency, removing some of the returns to speed, and shifting the competition to other margins.

Automated financial trading seems to be degenerating in much the same way we would expect an automated game of Jeopardy! to degenerate. Much of the digital infrastructure associated with high-frequency trading may be useful, but some of it is simply Watson's thumb, grotesquely overgrown.

III. TEMPORALLY BUFFERED TRADING

The problem with using digital computers to play Jeopardy! is similar to the problem of using automated digital systems in financial trading: in both cases, the competitive energy is channeled into an unproductive latency race. Investments in speed are disproportionately rewarded. Below, I describe a proposed remedy in two different ways: once as a continuous lottery for priority, and then as an injection of temporal noise into the order flow. These are essentially the same remedy, but it is helpful to look at it from these different perspectives.²²

How can a lottery operate in a continuous trading environment? Suppose arriving orders are not exposed to the market right away, but instead are placed in a buffer, or queue. But this queue is not a first-in/first-out queue; instead, orders would be drawn out at random. In this sense it is more of a pool than a queue—call it a pooled queue. The average waiting time may be very brief, but some orders will be kept waiting longer than others. In effect, when the timing of access to the trading floor is precious, it is allocated by lottery.

In order for the pooled queue mechanism to function properly, all orders must be subject to the same delay mechanism, including cancellation orders. A "buy" order, for example, can be cancelled by entering an offsetting "sell" order, but the party placing the two orders should have no control over when, exactly, each order is processed, or which one will be processed first.

By imposing random delays on incoming orders, the pooled queue mechanism renders racing at short time scales impractical. These random delays can be very short—less than one second—and still have the effect of diminishing the opportunity and incentive to race. A brief delay will be of little consequence to nice traders and to most news traders. It will, however, discourage traders who are seeking to profit from "news-with-a-fuse"—information whose trading value is expected to vanish almost immediately because it will be widely available almost immediately. In particular, it will discourage racing the tape.

Although a random delay sounds like something traders would want to avoid, it is not. The pooled queue lottery forces all market participants to bear some short-term timing risk, but this is beneficial because that risk is unavoidable anyway. Trading a security in a buffered market should produce higher returns than trading an otherwise identical security in an unbuffered, "real-time" market. Order buffering produces higher returns by avoiding the costs and risks associated with the very short-term transient

The author has a U.S. patent pending on the use of a randomizing temporal buffer in financial trading: Sys., Method, & Computer-Readable Medium for Improving the Efficiency & Stability of Fin. Mkts. U.S. PTO Non-Provisional Appl. No. 13/828,398 (filed Nov. 7, 2013).

information asymmetries that exist in the real-time market. Short-term racing is a negative-sum game, and most traders will be happy to avoid playing it. The pooled queue buffering mechanism allows market makers, nice traders, and most news traders to trade with each other and to separate themselves from news-with-a-fuse traders.

One useful feature of temporal buffering is that it can be adjusted to accommodate varying market conditions as they develop, while maintaining continuous and orderly trading. For example, the average delay could be set at a very small number, even zero, for normal market conditions. The average delay (size of the buffer) could be increased quickly—up to some predetermined limit—in response to sudden price movements, unusual trading volume, unusually one-sided order flow, unusually low liquidity, or other indicators of a turbulent market. This promises to be more effective and less disruptive than circuit breakers, which, instead of discouraging racing, can create new opportunities to engage in it.

Note that it is not necessary to create a physical buffer to implement the pooled queue mechanism; it suffices to impose randomly distributed short delays to the incoming order flow. In effect, the pooled queue mechanism suppresses racing by introducing a synthetic jitter—a random variability in the timing of a trade. In other contexts this is called dithering, and it has an interesting history.

Bomber crews during World War II noticed that the mechanical computers used in navigation and bomb sights appeared to operate more reliably during flight than they did on the ground. The reason was mechanical vibration—it acted as a lubricant and kept the gears from sticking, and torque from accumulating in the mechanical parts. Engineers soon began to attach small vibrating motors to earthbound computers in order to achieve the same result. ²³

With the advent of digital computing, dithering did not disappear, but took on a new form. The digital processing of analog (continuous) data tends to introduce distracting artifacts at the higher frequencies; by adding high-frequency noise (often called "blue" noise, because blue is at the high-frequency end of the visible spectrum), these artifacts can be, if not removed, rendered invisible.

If you are reading this paper on a computer screen, chances are good that the computer's audio circuit uses sonic dithering with blue (here, meaning high-pitched) noise to remove audible artifacts from digitized music. The video adapter likely uses spatial dithering with blue (here, pixel-scale) noise to remove digital artifacts from displayed photographs and movies. If it is a high-end system designed for gaming, it may also use

²³ See KEN C. POHLMANN, PRINCIPLES OF DIGITAL AUDIO 44 (6th ed. 2010).

temporal dithering with blue (here, brief delays) noise to provide a fluidity of movement that digital rendering may otherwise find difficult to achieve.

What the pooled queue mechanism provides to continuously trading financial markets is temporal dithering, or high-frequency timing noise. Just as it does with movies and video games, this noise supplies a fluidity of movement. Indeed, the very concept of continuity in a digital system is something of a challenge. This is not a problem as long as the digital processes are much faster than the processes they are controlling; megahertz and now gigahertz computers have no trouble providing the illusion of continuity to music we listen to on a kilohertz scale. Similarly, computers have no trouble suppressing vibration in machine tools. However, when a continuous process being controlled by a computer has patterns that resonate in the same frequency range in which the computer operates, digital artifacts and instabilities may appear. Temporal noise erases those.

One of the lessons of fishery regulation is that it is all too easy to suppress one rent-dissipating mechanism only to have another one pop up elsewhere. Even if the random delay mechanism succeeds in suppressing HFT racing, how can we be sure that we are not just shifting the inefficiency somewhere else?

To answer this question, we need to think in terms of a competition for "market share" among different market-clearing mechanisms. Prices, races, queues, and lotteries all may compete simultaneously to clear a market. When the prizes get unusually large, for example, people will often get up early (racing) to get a good place in line (queuing) to buy (pricing) lottery tickets (lottery). Similarly, rush-hour traffic on a congested toll road may be simultaneously governed by a dynamic combination of prices, races, queues, and lotteries.

The random delay mechanism allows an essentially costless lottery to occupy the high-frequency bandwidth in a financial exchange—the bandwidth where racing ordinarily would occur. It effectively blocks access to that bandwidth where information asymmetries are prevalent (or, more accurately, can be bought), and where trading is thereby inefficient. By shifting trading to lower frequencies, it allows the price mechanism to operate on a time scale where public information is more evenly distributed. The result is not just a symptomatic treatment; the random delay mechanism is designed to mitigate the underlying market failure and thereby make trading more efficient.

Experiments with random delays and with other forms of temporal buffering are already taking place.²⁴ We will briefly comment on three.

Andriy Shkilko & Konstantin Sokolov, Every Cloud has a Silver Lining: Fast Trading, Microwave Connectivity and Trading Costs (October 2016), http://ssrn.com/abstract=2848562. (One recent paper examines a natural experiment, finding that rain and snowstorms, by disrupting the microwave signals used by the fastest traders, appear to improve market liquidity and to reduce trading

A. ParFX and the Random Delay

In London, a coalition of banks has built a random delay mechanism into a new currency trading platform called ParFX,²⁵ using an average trading delay of 80 milliseconds. Since it first began trading in April 2013, the company reports that the buffers are working as intended, and more recently some competing foreign exchange platforms have begun to adopt a similar technology. The random delay seems to be especially popular with banks exchanging Australian dollars with other currencies. Australia is a major commodity exporter, leading to a large demand for currency exchange. Because of its location, there is inevitably a substantial latency when trading on the major exchanges in London—and lots of incentive to engage in latency racing. The ParFX random delay mechanism makes it feasible to trade without having to make the investment needed to engage in racing, or to defend against it.

B. IEX and the Deterministic Delay

IEX is an equity trading platform in New York, whose story has been well told in the Michael Lewis best-seller, *Flash Boys*. Since it began trading in October, 2013, IEX has gained market share; within two years it accounted for 10 percent of all equity trading on alternative platforms. On June 17, 2016, the SEC granted IEX's application to become a full-fledged stock exchange—an application that had prompted competitors to raise a number of questions about the IEX trading system.²⁷

Instead of a random delay, IEX disrupts HFT strategies by imposing a 350 microsecond delay on all incoming orders. This deterministic delay constitutes a synthetic latency—in contrast to the synthetic jitter (variability of latency) imposed by a random delay. But the intent is similar: the delay provides assurance to customers trading on IEX that they are trading with other customers who also are willing to tolerate a brief delay. The fixed delay, because it is predictable, may be more susceptible to gaming. On the other hand, according to *Flash Boys*, some of the IEX team believe that a random delay would be more easily gamed.

In October 2012, I had proposed to Brad Katsuyama and the IEX management team that they consider incorporating randomizing temporal buffers into their new exchange. We met in January 2013, to discuss it. I

costs. While it is too early to draw conclusions, this observation may provide empirical confirmation that random noise can have a beneficial effect on trading.).

²⁵ PARFX, www.ParFx.com (last visited Aug. 8, 2016).

MICHAEL LEWIS, FLASH BOYS: A WALL STREET REVOLT (2014).

²⁷ In the Matter of the Application of Investor's Exchange, LLC for Registration as a National Securities Exchange, Release No. 34-78101, File No. 10-222 (June 2016).

did not meet with the IEX technical staff, dubbed the "Puzzle Masters," but they apparently also read my proposal. Here is how Michael Lewis described their reaction:

[O]ne professor suggested a "randomized delay" . . . The Puzzle Masters instantly spotted the problem: Any decent HFT firm would simply buy huge numbers of lottery tickets—to increase its chances of being the 100-share sell order that collided with the massive buy order. "Someone will just flood the market with orders," said Francis. "You end up massively increasing the quote traffic for every move." 28

The "Puzzle Masters" were wrong about how a randomizing temporal buffer would work. First, "massive" orders would not be monolithic; typically, they would be broken into smaller pieces, each with its own random delay. Second, the system would not allow orders to be cancelled without also imposing a random delay on the cancellation, so that anyone "flooding the market" with exploratory sell orders would find those orders being crossed—i.e., being matched with the component parts of any buy orders with which they "collided."²⁹

Crossing orders is exactly what a financial exchange is supposed to do. Could an HFT firm nonetheless use this flood-the-market strategy to uncover information about the existence of a large unfilled supply or demand? Sure, if the HFT firm was willing to accept the resulting trades. But the information it thereby gained about the state of the market would be partial and would emerge at a pace that provided little advantage to the most extreme speed-based trading algorithms. The randomizing buffer system is not intended to hide information indefinitely, nor to prevent *any* market movement in response to large orders; it is simply intended to dampen the bleeding-edge latency arbitrage that depends for its success on high-cost high-speed strategies.

In our conversations, Katsuyama was unsure whether the Puzzle Masters had uncovered a real vulnerability, but he gave other reasons why IEX decided not to use what I had proposed. The most compelling of these was that a random delay might be viewed by the SEC as a violation of Regulation NMS.³⁰ His own uniform "fixed delay" solution had the advantage in that he could implement it in the form of the famous shoebox—a 60 kilometer coil of optical fiber through which all incoming orders were received. Katsuyama correctly predicted that the SEC would have difficulty finding fault with this: the fiber doesn't discriminate, all exchanges use fiber for access, there are no rules governing the length or

²⁸ Id. at 174.

²⁹ Budish, et al. make a similar error. They dismiss random delays as ineffective because their model allows for redundant orders and cancellations without penalty. Budish et al., *supra* note 1, at 1610-11.

³⁰ See generally Regulation NMS 17 C.F.R. § 242.600 et seq. (2015).

routing of the fiber, and there are precedents for the use of coils. While I think random delays are a theoretically more elegant solution, I have to acknowledge that Katsuyama's architecture nicely finessed the more problematic aspects of existing SEC regulations.

C. Frequent Batch Auctions

In addition to randomizing and fixed temporal buffers, batched call auctions are another option that has been discussed as a solution to the excesses of HFT racing. Budish, et al, make a persuasive case that batching of orders will mitigate many of the difficulties inherent in trying to maintain "continuous" trading.³¹ They do not specify the size of a batch, but argue that it can be less than a second, and still be effective. Some have objected that batched trading will involve thousands of predictable opening and closing events each trading day, creating lots of small opportunities for HFT strategies to arbitrage. On the plus side, the call auction mechanism that is used for price discovery in batched trading has some important advantages, including its ability to erase the distinction between makers and takers of liquidity.

IV. COMPETITION ACROSS TRADING PLATFORMS

Eric Budish et al. propose that batched auctions be required for all equity trading. They acknowledge that there is another possible approach: "A second area for future research is the nature of competition among exchanges. Suppose that one or more exchanges adopt frequent batch auctions while other exchanges continue to use continuous trading: what is the equilibrium? Can an entrant exchange that adopts frequent batch auctions attract market share?" Not only are those the right questions to be asking, they are questions that should be addressed first, before even considering the possibility of issuing a regulatory mandate that would require every exchange to use batched auctions.

Similarly, former SEC Commissioner Larry Harris has proposed mandatory random delays: "Regulatory authorities could require that all exchanges delay the processing of every posting, canceling, and taking instruction they receive by a random period of between 0 and 10 milliseconds." Even if you believe, as I do, that random delays will create a more efficient trading platform, that is no reason to mandate them.

³¹ See generally Budish et al., supra note 1.

³² *Id.* at 1617.

³³ Larry Harris, *Stop the High-Frequency Trader Arms Race*, Financial Times (Dec. 27, 2012) http://www.ft.com/cms/s/0/618c60de-4b80-11e2-88b5-00144feab49a.html#axzz4GlfAZkOp.

As they are developed, temporally buffered trading mechanisms, running alongside real-time markets, will give market participants a choice of how fast they want to trade. The racing hypothesis implies that slightly slower trading will appeal to many investors, and will produce superior returns. But it will be far safer for regulatory agencies to loosen regulations in order to allow these competitive experiments, than to tighten regulations and impose a uniform remedy. Buffered financial markets can exist side-by-side with continuous real-time markets without difficulty. Automated arbitrage between these markets will keep them synchronized, with the caveat that arbitrage orders must follow the rules in each market they trade in. We have plenty of experience with different markets operating at different speeds, such as the retail market for mutual funds, trading once per day, and the market for Exchange Traded Funds (ETFs), trading continuously, or the venerable London gold fix, even while gold is traded continuously and sometimes frantically elsewhere.

Ironically, regulators are likely to make much more rapid progress by allowing innovations, than they will by mandating them. One reason is the heterogeneity of market participants. Even if a temporally buffered market is more efficient for most traders, it may be intolerable for an important subset. Mandating its use would create difficulties for firms that are attempting to keep an ETF aligned with its underlying market basket, for example. Mandating any such reform is likely to ban trading strategies that, for some participants, are essential and perfectly legitimate. There will be strong resistance to imposing such restrictive mandates.

This problem is aggravated because innovative trading platforms may need to impose some very specific restrictions, such as the order types that they will process. An exchange using a random delay, for example, will need to put restrictions on how orders may be cancelled. It is neither necessary nor desirable to impose these restrictions on the entire market; they are only needed for orders that are processed on that particular exchange.

Regulators of all types of financial trading, in the U.S. and around the world, will be challenged to provide a regulatory framework that allows different trading platforms to experiment with a variety of market structures, and that encourages them to interoperate, to compete, and to evolve in response to customer demand. One essential ingredient of such a regulatory framework will be a more sophisticated understanding of time, as it is measured across a spatially distributed trading system. With that in mind, we turn to a final topic: the physics of space-time.

A. *On the Special Relevance of Special Relativity*

The views of space and time which I wish to lay before you have sprung from the soil of experimental physics, and therein lies their strength. They are radical. Henceforth space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality.³⁴

The pace of financial trading is running into the physical limits set by the speed of light, and this has implications for how we think about market microstructure. The theory of special relativity³⁵ helps us understand the nature of the constraints that traders face. For example, some commenters have proposed that all markets should be synchronized to a master clock, failing to appreciate that—at the speed of today's markets—there is no such thing as a master clock. Space-time is structured in a way that makes absolute time impossible. Critics of the IEX application to become an exchange objected to the speed bump that may cause transactions to take place at "stale" prices, but that claim needs to be evaluated in a context where, at some level, all prices are somewhat stale.

Thus, as Albert Einstein noted:

[W]e see that we cannot attach any absolute signification to the concept of simultaneity, but that two events which, viewed from a system of co-ordinates, are simultaneous, can no longer be looked upon as simultaneous events when envisaged from a system which is in motion relatively to that system.³⁶

In the theory of relativity, an "event" has a precise meaning; it is a specific set of coordinates—a four-dimensional point—in space and time. From any such point, one can imagine a burst of light traveling in all spatial directions. The set of all points that can be reached by that burst of light is the event's "future light cone" (so called because of its appearance when time is graphed on the y-axis, as in figure x), and it contains all events that are unambiguously subsequent to the event at the origin. There is a second light cone that contains all past events. In addition, there is a set of points that lie outside either the past or future light cones—these points are "causally disconnected" from event at the origin. Thus the envelope of an event's light cone is sometimes called the "causal boundary," because if

³⁴ Hermann Minkowski, Address to the 80th Assembly of German Natural Scientists and Physicians (Sept. 21, 1908), published later as: Hermann Minkowski, *Raum und Zeit* [*Space and Time*], 10 PHYSIKALISCHE ZEITSCHRIFT 104-11 (1908), *translated in SPACE AND TIME: MINKOWSKI'S PAPERS ON RELATIVITY* (Vesselin Petkov ed., Fritz Lewertoff & Vesselin Petkov, trans., Minkowski Institute Press 2012). Minkowski was Einstein's physics teacher.

³⁵ See Albert Einstein, Zur Elektrodynamik bewegter Körper [On the Electrodynamics of Moving Bodies], 17 Annalen der Physik 891-921 (1905), translated in A. Einstein, On the Electrodynamics of Moving Bodies, FOURMILAB (NOV. 1999), https://www.fourmilab.ch/etexts/einstein/specrel/www/.

³⁶ *Id*.

two events lie outside each other's light cones, there can be no information flow, and thus no causal connection,³⁷ between them.

High frequency traders attempt to gain advantage in the sequence of market events—the acquisition of information and the execution of trades—by skating ever closer to the edge of the light cones that connect those events. But no technology can operate outside the limits of the causal boundary, and that provides one method of trying to avoid disclosing information to the HFTs. A smart order router can break a large order into multiple components and direct them to multiple exchanges. If it takes into account the latency of delivering those orders to their destinations, and controls the timing so that the arrival events lie outside each other's light cones, each component order will be able to execute at its destination, without being influenced by the simultaneous existence of the others.

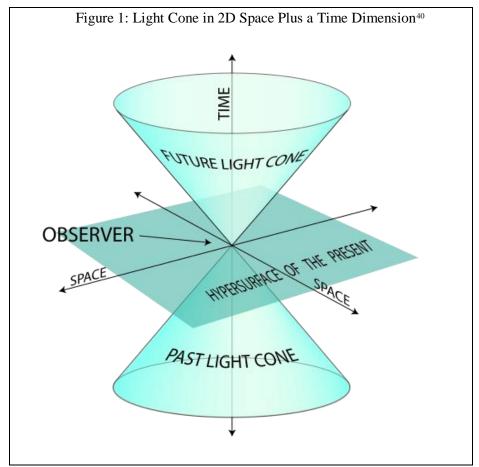
So, for example, IEX mentions this technique in a patent application: ³⁸ "Ensuring Simultaneous Information Delivery to Geographically Distinct Trading Systems: [M]any trading systems may target information delivery on a temporal plane." Note that IEX's "temporal plane" corresponds to the plane labeled "hypersurface of the present" in Figure 1.

Here we have to take note of a peculiar wrinkle in time. Simultaneity is a relative concept—it depends upon the frame of reference of the observer.³⁹ So, while we can draw a hypersurface of simultaneity, or "the present," it is in fact arbitrary. Observers traveling at different velocities will always be able to agree about the ordinal sequence of events that are causally connected, but they will not be able to agree about the sequence of causally disconnected events. Two disconnected events will appear simultaneous to one observer, while other observers will put them in different order. Regulatory agencies are anxious to improve audit trails and to include precise time-stamps, so that after any market dislocation they will be able to reconstruct the sequence of events across multiple linked markets. For a spatially separated set of transactions, however, there is an irreducible ambiguity to the sequence of events, which can never be resolved more precisely than the laws of physics allow.

Since this is a law journal, it is important to clarify that the phrase "causally connected," in the present context, does not imply actual causality. It merely indicates that events can be traversed at less than the speed of light–along a "timelike curve," or worldline, in the parlance of special relativity.

³⁸ Bradley Katsuyama, et al. (assignee: IEX Group). Transmission Latency Leveling Apparatuses, Methods, & Sys., U.S. Patent Application, Publication No. 20150073967 (filed July 3, 2014).

³⁹ Different observers traveling at different velocities.



This has implications when thinking about the meaning of such terms as "stale" prices. First, we need to recognize that, in any spatially distributed system of trading centers, it will not be possible to avoid some degree of price staleness. Indeed, it will not be possible to make an unambiguous definition of staleness. Nonetheless, it is true that temporal buffering will increase staleness in the sense that transactions will take place that could have been processed sooner at a different location. Is that a problem? Remember, an efficient market cannot be the fastest possible market. Speed has a cost, and infinite speed has an infinite cost. The prices on the temporally buffered exchange may be preferable for two reasons. One, they can be accessed without having to go the expense of trading at high speed. Second, many traders will prefer to accept a slower pace, as long as they are sure that they are trading with others who are similarly patient. Temporal buffering encourages a self-selection process. Those

⁴⁰ Light Cone in 2D Space plus a Time Dimension, WIKIPEDIA (Aug. 9, 2016), https://en.wikipedia.org/wiki/Light_cone#/media/File:World_line.svg.

who need fast execution can obtain it on real-time markets while those who can tolerate a brief delay will choose buffered markets. For them, staleness may be a virtue.

CONCLUSION

In confronting the issues that have emerged in recent years regarding market microstructure, the primary challenge for regulators of financial trading is neither to decide which practices to ban, nor which to mandate. Instead, it is to build a framework in which different trading mechanisms can compete, where innovation is encouraged, and more stable and efficient markets are permitted to evolve.

MINING MANNE'S VEIN

M. Todd Henderson[‡]

In the Discovery Channel's show *Gold Rush*, Todd Hoffman and a bunch of other average Joes (and a few scattered Janes) head to the Yukon Territory to cash in on the recent boom in gold prices. One of the first lessons they learn is that it won't be easy. The Klondike Gold Rush (1896) brought 100,000 people to the territory in search of fortunes, and by the turn of the century, they'd found most of the easy gold. What remains is deep in the ground, and where it does exist, is only economically viable because of the efficiencies possible from today's technology.

I came to the legal academy like Todd Hoffman, figuring that I could make my name (although probably not a fortune) mining for ideas. But, like my mining doppelgänger, I learned that most of the good ground had been worked over. Every time I thought I was on to something interesting, a colleague would tell me that so-and-so published the same idea in 1973 or to read the book on the subject published in 1956. The legends that preceded me had the virgin ground. The really great ideas—the ideas that are the foundation for what we do—have been described. What often remains for our generation of miners is to revisit the ground that has already been turned in the hopes that with new technology (e.g., STATA) or new conditions in the world will provide opportunities to find a few flecks.

At the risk of pushing the analogy too far, Miner Todd often speaks of the legendary miners of the Yukon, the special ones of the 100,000 who innovated, who worked harder or smarter, and who developed the things we take for granted today. In the show, a miner will have an idea, and one of the old-timers will point out that Millett or Carmack or other greats had the same idea long ago. For modern miners, these ancestors are not just sources of information and knowledge, but also inspirations. Professor Todd finds inspiration in the old timers, too.

For those of us working in the fields of law governing business and the economy, the two most legendary miners are Ronald Coase and Henry Manne. I cannot count the number of times that I ran into Douglas Baird's office with the inspiration that would cement my legacy, only to have him reach onto his shelf and pull out a copy of Coase's *The Nature of the Firm*¹ or Manne's *Mergers and the Market for Corporate Control*². At first, I was discouraged. The thought of running these ideas further to ground or

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¹ R. H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386 (1937).

² Henry G. Manne, Mergers and the Market for Corporate Control, 73 J. Pol. Econ. 110 (1965).

rephrasing them to meet modern ears did not seem like work worth doing. After all, no one likes to tinker irrelevantly at the edges of greatness.

But then I learned not to be deterred but inspired. Although I'll most likely never be a Manne, I decided that thinking in his tradition was work worth doing. Seeing the world as Manne did opened up new possibilities in my own research and way of thinking. It was possible to use the lens that he gave us, whether it is about insider trading, corporate control, or law and economics in general, to view our modern world in a different way. And maybe, just maybe, there might be gold still left in the tailings and ground we've been left.

This essay—in celebration of the work of Henry G. Manne—offers a brief summary of his contribution to our understanding of mergers and acquisitions, some ways in which it helps us understand corporate law doctrine, and a summary of some work I've done and am doing that was directly inspired by Manne and his ideas.

Before doing so, however, I want to note that Manne was an inspiration for me not only for the questions he asked and the answers he gave, but also for the manner in which he mentored me. From afar and with no direct connection to me, he took an interest in my work, encouraged me, and struck just the right balance between critic and fan. I hope I can pass along this grand tradition of mentoring and generosity, even in some small way to those who come after me. I am better at what I do by virtue of Manne's work and his generosity.

I.

Businesses have been buying other businesses for as long as there have been businesses. From then until about the mid-1960s, these acquisitions or mergers were analyzed by scholars and regulators through the narrow lenses of industrial organization and antitrust. Business thinkers cared about the optimal firm size, and at least since Coase³ about the tradeoff between the costs and benefits of command-and-control decision making that happens within firms compared with the market-based decision making that happens outside them.⁴ Lawyers cared about antitrust: that is, the impact that industry consolidation would have on competition in markets for capital, labor, and goods and services. If you asked someone why businesses combined, they would have said either to realize production efficiencies or increase market power.

Then came Manne. In his 1965 paper, Mergers and the Market for Corporate Control, he offered a new and, it turns out, revolutionary idea on

³ Coase, *supra* note 1.

⁴ *Id.* at 386-88.

how to think about mergers and acquisitions.⁵ Manne did so by turning his gaze from the gains from economies of scale and market power that may come with a merger to the potential that takeovers could improve management of firms in general. He believed that shareholders might benefit not just from realizing production efficiencies or capturing more of the surplus from consumers, but also by the gains that a well-functioning market for control would have on the quality of management in meeting shareholder demands. His target was the oldest and grandest idea in corporate law at that time, and even today: Berle & Means's concept of the separation of ownership and control.⁶

In "The Modern Corporation and Private Property," Berle & Means describe and lament that the modern corporation was characterized by a cleavage between those who owned the corporation (shareholders) and those who ran it (managers). What Jensen & Meckling later called "agency costs" plagued corporate efficiency because the deciders did not bear the full costs (both positive and negative) of their actions. Accordingly, the conventional wisdom circa 1965 was that managers made decisions that primarily benefited themselves at the expense of shareholders. Through this lens, mergers or acquisitions had a potential dark side beyond mere antitrust concerns. Managers might build empires, either out of hubris or because their compensation (then, usually cash) was tied to the size of the firm they ran. Warren Buffett famously summed up this thinking in a way only someone from Omaha could:

Many managers were apparently over-exposed in impressionable childhood years to the story in which the imprisoned, handsome prince is released from the toad's body by a kiss from the beautiful princess. Consequently, they are certain that the managerial kiss will do wonders for the profitability of the target company. Such optimism is essential. Absent that rosy view, why else should the shareholders of company A want to own an interest in B at a takeover cost that is two times the market price they'd pay if they made direct purchases on their own? In other words, investors can always but toads at the going price for toads. If investors instead bankroll princesses who wish to pay double for the right to kiss the toad, those kisses better pack some real dynamite. We've observed many kisses, but few miracles. Nevertheless, many managerial princesses remain serenely confident about the future potency of their kisses, even after their corporate backyards are knee-deep in unresponsive toads.⁸

In short, prior to Manne, we believed that mergers and acquisitions were about some combination of market power, productive efficiency, and

⁵ Manne, *supra* note 2, at 114-19 (1965).

 $^{^6}$ Adolph Berle & Gardner Means, The Modern Corporation and Private Property, 69-71 (1932).

Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, 3 J. FIN. ECON. 305, 308-10 (1976).

⁸ Chairman's Letter to Shareholders, BERKSHIRE HATHAWAY ANNUAL REPORT, 1981, http://www.berkshirehathaway.com/letters/1981.html.

managerial self-interest. Despite Manne, some still believe this is the predominate explanation for mergers, as the Buffett quote suggests.

Manne offered an alternative explanation, and it proved to be one of the most important ideas in this history of business law. The idea, like all great ones, is profoundly simple. Manne argued that mergers and acquisitions could benefit shareholders by providing a mechanism through which shareholders could discipline managers. Corporate takeovers were not necessarily a symptom of managerial agency costs but perhaps, instead, their cure.

The argument starts from the observation that control of the corporation is an asset. Those who control the firm get to appoint the managers of the firm, and this control brings with it opportunities for the owners to enrich themselves by making the firm more profitable. This fact is established by the observation that control blocks in public companies are worth about 20 to 50 percent more than non-controlling shares in the same company. And, like all valuable assets, this one, Manne observed, trades in a market. Here is how he put it in 1965:

"The basic proposition advanced in this paper is that the control of corporations may constitute a valuable asset; that this asset exists independent of any interest in either economies of scale or monopoly profits; that an active market for corporate control exists; and that a great many mergers are probably the result of the successful workings of this special market."9

This was an entirely new explanation for mergers and acquisitions: companies specializing in management of businesses may identity other companies with under-performing management, buy that company at a discount from its potential value, replace the management, realize the company's potential, and then sell it at a premium to its purchase price. Improvements in managerial efficiency could create value, just as increases in market power or economies of scale, and these potential improvements would attract buyers who believed they had a better managerial mousetrap. In effect, Manne predicted the modern private equity industry.

Then, Manne's insight linked this possibility with shareholder welfare. He argued that this profit opportunity would attract investments in managerial efficiency and provide discipline for the slack that might otherwise arise from the agency costs of the separation of ownership and control. Here is Manne's punch line for how shareholders can benefit from this market like consumers benefit in typical product markets: "[T]he market for corporate control gives to these shareholders both power and protection commensurate with their interest in corporate affairs."10

⁹ Manne, supra note 2, at 112.

With this simple argument, set forth on just ten short pages, Manne provided the entire framework for thinking about corporate governance for the next five decades and beyond. Every law student learns about the market for corporate control, and every academic paper that examines issues of corporate governance does so with an eye on the relative efficiency of this market. This is because statutes, court decisions, and regulatory policy that impacts the competitiveness of this market have direct implications for the efficiency of corporate management, and thus the entire capitalist economy.

II.

Manne's argument did not address important questions about the optimal regulation of this market, it just introduced it as a concept. Thus, today we still wrestle with the social welfare implications of legislation and court decisions that makes takeovers more or less likely. Some (like Buffett) believe takeovers destroy value; others believe they destroy jobs; while others think they are bad for shareholders; and still others think they create value and discipline managers. Moreover, many modern legal debates turn on our assumptions about the value of a robust market for corporate control versus the potential gains from insulating management from short-term pressures of this market. Rules regarding poison pills and other takeover devices, debates about federal interventions in the takeover market (e.g., the Williams Act of 1968), and arguments about state competition for corporate law all are implicated by assumptions about Manne's market for corporate control. The recent spate of takeover-related lawsuits (there are something like five suits for every deal!) and the growth of activist investors, who offer a potential sub-takeover mechanism for disciplining managers, are best considered in light of Manne's theory.

This is because Manne is fundamental. His idea about the control market has driven doctrine. To take just one example, Manne's insight allows us to explore fundamental questions about minority and majority shareholder rights. Majority or controlling shareholders have incentives to offer minority shareholders protections against expropriation, since doing so would reduce the risks for them and therefore lower the cost of capital. But what is the optimal scope of minority shareholder protection? Manne helps us answer this question.

One possibility would be an equal sharing rule: everything majority shareholders get, minority shareholders get. This is the rule in some places, and it is not unjustifiable. It has the virtue of reducing the possibility that a majority shareholder will take actions that enrich itself at the expense of the minority. For instance, majority shareholders may direct corporate policy in ways that generate private benefits for the majority but not the minority. This could be in the form of direct cash payments, but these are unlikely. More likely would be satisfying the majority shareholders preferences for

the tradeoff between profits and other corporate goals. The recent spat between the company Craigslist and eBay—as a minority investor—is a good example.¹¹ The majority owner wanted to run the company with an eye on things other than the bottom line. eBay complained, arguing that the corporation is about maximizing profits for everyone, not satisfying the idiosyncratic preferences of the majority.¹² In agreeing with eBay, the Delaware court took a firm position in favor of wealth maximization as the goal of corporate activity, and in favor of minority shareholder rights.¹³

A better rule than equal sharing is one that requires any gains for majority shareholders to not be paid for by minority shareholders. In the language of economics, this is a Pareto improvement: some (the majority) are made better off, while no others (the minority) are made worse off. In other words, the pie is enlarged without anyone paying a disproportionate amount. An unequal sharing rule is one that minority shareholders benefit from, but seeing this is not easy. To understand the case for a rule of unequal sharing, it is best to see the idea of minority shareholder protection in action.

The rule that allows the majority to act selfishly but not at the expense of the minority can be seen in the classic corporate law case, *Sinclair Oil Corp. v. Levien.*¹⁴ Sinclair Oil, owned ninety-seven percent of Sinven, its Venezuela-based subsidiary.¹⁵ Sinclair caused Sinven to issue dividends to its shareholders in amounts greater than its income, prevented Sinven from expanding beyond Venezuela, and allowed another Sinclair subsidiary, wholly owned subsidiary, to breach contracts with Sinven.¹⁶ Minority shareholders in Sinven sued, alleging the majority shareholder—Sinclair Oil—made decisions that benefited the majority. For instance, the massive dividends drained assets from Sinven, leaving it unable to sustain operations, while providing Sinclair Oil with cash it needed to expand its operations.¹⁷ The trial court found for the plaintiff—minority shareholder on all three claims. It concluded that the majority pursued selfish policies, and that the minority shareholders were harmed as a result.

The Delaware Supreme Court reversed on two of the three counts, permitting only the claim for breach of contract. Importantly, the Supreme Court reviewed the dividend and business opportunity claims using the "business judgment rule," which is a deferential standard that insulates business decisions unless there is a conflict of interest.¹⁸ It applied the

EBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1, 6 (Del. Ch. 2010).

¹² *Id.* at 9.

¹³ *Id.* at 34.

¹⁴ Sinclair Oil Corp. v. Levien, 280 A.2d 717, 719 (Del. 1971).

¹⁵ Id

¹⁶ *Id.* at 720-22.

¹⁷ Id. at 722.

¹⁸ *Id*.

"intrinsic fairness" test in the breach of contract claim, however, requiring the majority to justify the result in terms that are nearly impossible to achieve. 19

The court applied the business judgment rule to the dividend issue because the minority shareholders got exactly what the majority shareholders did-their pro rata distribution of the cash proceeds of the dividend. The court stated that it would only apply the intrinsic fairness standard where the "parent . . . causes the subsidiary to act in such a way that the parent receives something from the subsidiary to the exclusion of, and detriment to, the minority stockholders of the subsidiary."20 The plaintiff argued that the dividend was excessive in that no firm hoping to stay in business would do such a thing. And, there was good reason to believe this was true: Sinven was at the end of term of an oil concession issued by the Venezuelan government, and was worried about expropriation of its assets in the country. Sinclair was acting in its own interests, but the court blessed this so long as in doing so it did not favor itself in the actual execution of the policy. Sinclair did not receive a benefit "to the exclusion and at the expense of the subsidiary" beyond that contemplated by the terms of a reasonable shareholder's investment in the company.

On the second issue—the alleged blocking of new opportunities for Sinven—the court again applied the business judgment rule, noting that "the plaintiff could point to no opportunities which came to Sinven." Sinclair generally used country-specific subsidiaries for a variety of reasons, and thus new opportunities in Canada or Africa would not generally be available to the Venezuelan subsidiary. Sinven had no right to pursue these projects, and it was within the business judgment of the board (as controlled by Sinclair) to demand Sinven focus on Venezuela. One could argue that there was a bias in this decision, since some Sinclair subsidiaries were wholly-owned and others were not, but the court believed a reasonable line could be drawn that explained the allocation of opportunities for reasons other than minority shareholder oppression.

As to the final claim—the breach of contract claim—the difference in share ownership by Sinclair Oil in the two parties to the transaction was important. In allowing a wholly owned subsidiary to breach a contract with a subsidiary in which there were minority investors, Sinclair favored itself in a direct and tangible way that the court could see with its own eyes and not have to speculate about. To see this, imagine that the contract is worth \$100, meaning the wholly owned subsidiary owes the ninety-seven percent owned subsidiary that much. If Sinclair directs Sinven to not sue for breach of the contract, then the parent company gains three dollars at the expense

¹⁹ *Id.* at 23.

²⁰ Sinclair, 280 A.2d at 720 (emphasis added).

²¹ Id. at 722.

²² Id

of the minority shareholders—it gains \$100 for one subsidiary and loses \$97 from the other. Because of this, the court required Sinclair to show why this transaction was "intrinsically fair," which is a burden it could not meet.²³ This transaction did not give something to the majority while leaving the minority shareholders no worse off; it took from the minority and gave it directly to the majority.

The lesson from the *Sinclair Oil* case is that courts are reluctant to police majority—minority conflicts, except when there is a clear conflict of interest that manifests itself in objectively verifiable gains to the majority that the minority pays for. This rule permits the majority to gain, so long as the minority is not made worse off by the transaction. Although this seems like a rule that would be favored only by the majority, it is in fact the optimal rule for minority shareholders too! There are two reasons for this.

The first reason is that by limiting the number of suits based on intershareholder conflicts, the firm can reduce the collateral costs of business decisions. If the litigation system were perfect and costless—that is, only meritorious suits were brought, judges made no errors, and the entire system cost nothing—then the scope of judicial review of business decisions could be expanded to cover more complaints by minority shareholders. But none of these things is true. Once we allow minority shareholders to second-guess the business decisions of majority shareholders in court, the potential for abuse by minority shareholders becomes obvious: minority shareholders can threaten to impose costs on the majority unless their way is followed. More and more decisions will find themselves in expensive and long court battles, which not only waste firm and social resources (since judges are utilized to settle shareholder squabbles), but also undermine the central efficiency of the corporation: that the board has the authority to decide how the firm should act. Again, from an ex ante perspective, minority shareholders are better off allowing more discretion by managers under the charge of majority shareholders. That is, in any individual case, minority shareholders may prefer a lawsuit because it will improve their outcomes, but behind the veil of ignorance before the majority has acted in a particular case—minority shareholders are better off as a group if they give the majority more discretion. This is especially true given the points made above about the ability of minority shareholders to price governance in the market, to exit in the event of abuse, and to insure against opportunism through portfolio diversification.

The second reason that minority shareholders should not insist on equal sharing with majority shareholders is that such a rule would decrease the quality of corporate governance across all firms. This is where Manne bears fruit. The market for corporate control is one of the most powerful constraints on the agency costs associated with the separation of ownership

²³ *Id.* at 723.

and control. Managers, left to their own devices may shirk, enrich themselves, engage in empire building, waste money on pet projects, donate excessively to private charities they favor, or just make bad business decisions. The risk of a takeover by another firm or by an investor, such as a private equity firm, is a substantial constraint on these possibilities. After all, if a firm is being mismanaged, it is more valuable with a better manager. This gives outsiders an incentive to buy the firm at a discount from the value it would have under better management, replace the management, and profit from the increased value. But there are many transactions in which an equal-sharing rule would impede the market for corporate control. A takeover of a firm might be cost-justified only if the buyer can capture more than its proportional share of the gains from the acquisition. In a classic 1981 article, Frank Easterbrook and Dan Fischel set these out, noting, for instance, that:

[I]f the controlling shareholder in a going-private transaction or merger of a subsidiary into a parent corporation must underwrite the costs of future value-increasing transactions and thereby incur a proportionally greater risk of loss than the minority shareholders in the event expectations are not realized, the deal may become unprofitable to the controlling shareholder if he must share the gains with minority shareholders if all goes well.²⁴

Minority shareholders in general rationally prefer a world in which the majority can capture some premium for exchange for a sale of control, since this increases the probability that there is a sale of control, which then increases the discipline of the market for corporate control. As in the examples above, conditional on their being an offer for a change of control, minority shareholders would strictly prefer an equal sharing rule. But this is wrong time to evaluate the socially optimal rule, since such a rule makes offers for a change of control less likely. Behind the veil of ignorance, that is, ex ante, minority shareholders may prefer to have more offers arise (at lower value to them) than to have fewer offers (at higher value to them). This is because of the collateral benefits of investing as a minority in an environment where there is a robust market for corporate control (and thus lower agency costs). It is also because minority shareholders can capture the gains from all acquisitions, ex ante, by holding a diverse portfolio of shares. In other words, the only minority shareholder who gains from an equal sharing rule is one that holds only shares in the particular target company at a particular point in time. This is not the ideal investor on which to base social policy for all investors, as well as the economy writ large.

In this essay, I've made the following claim based on application of simple principles of law and economics: a rule of minority investor

²⁴ Frank H. Easterbrook & Daniel R. Fischel, Corporate Control Transactions, 91 Yale L. J. 698, 710 (1981).

protection based on the principles of Pareto efficiency is the most sensible legal rule. As in all questions, the best legal rule is one that looks at the issue ex ante, before bets have been made or interests been solidified. The question of minority shareholder protection should be considered not based on particular investors in a particular company, but rather based on what is best for all investors as it relates to maximizing welfare for the economy as a whole. Of course majority shareholders prefer to have a rule that favors them and minority shareholder prefer a rule of equal sharing after their investments have been made. But, before any investments or any particular transaction in a given case, all investors would prefer a world in which minority shareholders are protected from majority shareholders taking directly from them, and a world in which majority shareholders do not (by law) have to share all gains with minority shareholders. shareholder prefer minority protections because it makes minority investment more likely, which lowers the cost of capital, and allows greater wealth creation for the majority (and everyone else). Minority shareholders allow the majority to take unequally (so long as it is not directly from the minority, as in Sinclair Oil) because it encourages a market for corporate control that improves corporate governance, all without taking anything from minority shareholders that they cannot get by following a sensible investment strategy.

Without Manne, none of this would be clear or even possible. Why else would controlling shareholders be permitted to earn a control premium for their shares, if not as an incentive to encourage takeovers and the discipline on management that they bring? Our understanding and refinement of corporate law doctrine owes Manne a great debt.

III.

The power of the Manne inquiry—looking for novel reasons why firms do things and putting the things they do in a market framework—has inspired my own work in profound ways. In this final part, let me provide some examples of Manne's influence on me. In a series of two papers, as well as a forthcoming book on a new topic, I have taken Manne's idea about seeing a market where others have not and tried to apply it to different areas of corporate behavior.

A.

Why do firms engage in paternalism with respect to their employees? This question was inspired by Manne's question, why do firms merge? In *The Nanny Corporation*, I offered an explanation.²⁵

When teaching corporate law one year, a student confronted me about the decision of a Michigan company that gave workers an ultimatum to quit smoking, and when four didn't within the fifteen-month deadline, the company fired them. What did I think of this, the student asked? At first, I thought it might be explained by the preferences of management—smoking might lead to reduced productivity because of excessive smoke breaks or because of health-related absences, or maybe a particular manager just doesn't like smoking. I responded as a good Chicagoan would with the view that unless the firm was a monopsony, we shouldn't be troubled by these preferences. After all, if smokers are productive workers—maybe as programmers or late-night drivers—then they should be hired by other firms. In fact, beneficial sorting could arise from such rules, since the possible externalities from smokers—for example, odor—are lower when other workers are smokers.

But when I thought more about it, and thought about it through the lens of Manne, I saw a different, more nuanced angle to the story. After all, the company in question was providing something to someone, and Manne urges us to ask what exactly is being provided to whom, and to evaluate the market in which it is being provided.

Looking at it this way, the first Manne inquiry requires one to articulate exactly what is being provided. In this case, it is control of other peoples' behavior, or what we might call paternalism or nannyism. The company is trying to ban smoking by its employees, just as a parent might try to prevent a child from doing so or a government might try to prevent a citizen from smoking. Parents do this because they think it is better for their children, and also because it may reduce their own out-of-pocket expenditures. So too for government or insurance companies who only In all these cases, there is a common pool of serve non-smokers. participants—family members, citizens, the insured, workers, etc.—who bear some costs from the behavior of others in that pool. Thus, one might positively view paternalism as an attempt to reduce these externalities. When a smoker misses work, takes excessive breaks, or costs the firm more in insurance, it imposes costs on all firm stakeholders, with those who bear the most cost determined by the relative elasticity of the markets for labor, capital, and products. Crucially, these stakeholders demand paternalism, since it improves their wellbeing. In short, control over others is a valuable asset, just as control of the corporation is.

²⁵ M. Todd Henderson, *The Nanny Corporation*, 76 U. Chi. L. Rev. 1517 (2009).

And, like the market for control, there is a market for paternalism. Individuals in common pools demand the managers of those pools force individuals to internalize the costs of their behavior. Although families and government are the main providers of paternalism, business firms can provide it too. We should therefore not be surprised or turned off by the decision of this Michigan firm or the hundreds of emulators who are using mixes of carrots and sticks to regulate the behavior of their employees. They are just providing employees and/or shareholders with what they demand.

In fact, as I point out in that article, there are numerous advantages that corporations may have over governments in delivering the optimal level of paternalism. Firms compete in markets (for labor, capital, and products), and therefore unlike government, are subject to the feedback and discipline of these markets. If government overreaches, the fact may not be known for a long time, and any changes to the regulation must come through the political process, which is less responsive than market forces. For instance, a firm that bans behavior by workers that turns out to be positively correlated with productivity will see an immediate (negative) impact from this policy, and have strong incentives to reverse it.²⁶

There are many more. Firms may be more efficient at regulating certain behavior than governments. Imagine attempts to reduce obesity. Government could tax foods that are thought to lead to obesity, but this may be imperfect, and, in any event, run up against the powerful sugar or soda lobby. Instead, government could tax weight, but the process of weighing all citizens would be extremely costly and not likely as a political matter. Here we can see an advantage of private regulation of weight by employers. People with jobs go to them everyday, and it would be relatively easy for firms to require employees to step onto a scale or have their BMI measured on a periodic basis. And, again, if the policy is one that is not correlated with efficiency or is otherwise undesirable from the standpoint of workers, the firm will have strong incentives to abandon it. Workers have choices, and these preferences will help firms design tailored and efficient paternalism.

This is not to say that firms will always be or even often be the best nannies. Sometimes government will do a better job, while sometimes firms may. The crucial point is simply to see paternalism as a product, to see how it is demanded and supplied in a market, just as corporate control is a product that is also demanded and sold. And, as Manne pointed out for the market for corporate control, we should be focused on the competitiveness of that market, not trying to optimize paternalism ex ante through command-and-control regulation.

²⁶ For the information in this paragraph, *see* Henderson, *supra* note 17, at 1552-81.

On that front, the paper sets forth some reasons to believe that the market for paternalism operates at less than its optimal efficiency. This is in large measure because one of the key features of the market is the fact that government is both a supplier of paternalism and a regulator of its competitors in the market. For instance, government writes rules about how much employers are permitted to discriminate across employees when they charge them for employer-provided health insurance. As it turns out, firms are hobbled in their ability to pass on the full extra costs of being an obese smoker, say, and therefore are less efficient providers of paternalism than they otherwise could be. Courts and legislatures are also asked to limit firm paternalism, be it through cases alleging "discrimination" or "invasion of privacy," or through bills purporting to prevent or protect the same.

The bias in favor of government control, instead of market-based control is analogous to the same possibility in Manne's market for corporate control. After all, Delaware and the United States both provide rules that purport to regulate firm agency costs, while simultaneously writing rules, be they of antitrust or of the rules of business combinations, that regulate the market in which control is bought and sold.

B.

Just as Manne asked why firms engaged in combinations, in *Corporate Philanthropy and the Market for Altruism*, my colleague Anup Malani and I asked why firms engage in philanthropy.²⁷ Like Manne, we entered a debate with two, well-known views on the question. Some viewed corporate philanthropy as managerial graft, while others believed it helped the bottom line—doing well by doing good. But, inspired by Manne, we looked for other reasons.

To us, to understand why *corporations* engage in philanthropy and to know whether they should, one must return to first principles and explain why *anyone* engages in philanthropy. The answer is altruism: people feel good when others' lives are improved.

Knowing that individuals demand altruism or charitable utility, we then must ask how individuals satisfy this demand. The typical individual satisfies the demand by donating time or money to nonprofit organizations. A second approach is to pay taxes so that the government can help the downtrodden with programs like Medicaid and public housing. But forprofit corporations can also deliver altruism to individuals. Corporations do not merely channel funds to nonprofits, but do many things to help others at the expense of corporate profits. Firms now produce "green goods,"

²⁷ M. Todd Henderson & Anup Malani, *Corporate Philanthropy and the Market for Altruism*, 109 Colum. L. Rev. 571 (2009).

voluntarily reduce environmental emissions, and directly help provide medicines to the uninsured.

If nonprofits and the government already help others, and corporate giving is so contentious, why do people seek altruism from corporations? The answer is that corporations are sometimes better at delivering philanthropy than their competitors in the nonprofit and public sectors. An advantage that corporations have over nonprofits is that their ordinary profitmaking activities sometimes give corporations an edge at helping the less fortunate. For example, Starbucks' procurement of coffee beans puts them in a great position to identify and encourage productive small farmers in the developing world. Starbucks can offer its coffee consumers the ability to help these farmers by purchasing fair trade coffee. Economists call this "economies of scope," and it is something corporations likely have that most nonprofits do not.

An advantage corporations have over the government is that different corporations can offer different types of altruism to different people. Those who care about the environment can deal with Patagonia, which has pledged about one percent of profits to environmental causes, while those who are concerned about poverty in developing countries can engage with Google, which has made a similar pledge to that cause. The government, in contrast, is limited by the political compromises of the entire electorate.

Whatever the reasons behind the rise of corporate philanthropy, its presence highlights the fact that people "purchase" altruism like they do other goods. Unlike automobiles, accounting services, or cell phones, however, three types of organizations—nonprofits, the government, and for-profit corporations—provide individuals opportunities to buy altruism. Each competes on price and quality to sell altruism to consumers, just as corporations compete when selling other goods. We called this dynamic the "market for altruism," since there is competition to satisfy the demand for altruism just as there is competition to satisfy the demand for all other goods and services in the economy.

This re-characterization and framework helped us answer the two questions that drive the debate over corporate philanthropy: should firms choose to engage in philanthropy? And should they be allowed to? First, a corporation should only engage in philanthropy when it is efficient for it to do so, that is, when it has a comparative advantage over other corporations and, importantly, nonprofit organizations and the government. When a corporation is acting merely as a pass-through, it must explain why it should not step out of the way and let shareholders make these donations directly.

Second, the government should not prohibit or discourage corporate philanthropy in general, since firms are important and often efficient providers of altruism. For a well-functioning market, however, the government must do more than this—it must be careful not to discriminate without good reason among various providers of altruism. One source of

discrimination is government favoritism toward itself. Unlike in most markets, the government is a competitor in the market for altruism, and because it can compel individuals to purchase altruism from it through taxes, it may favor itself at the expense of charities or altruistic firms. This potential for crowding out of efficient providers of altruism is real and should be resisted, but it is not the most serious concern.

The more serious concern arises because the government writes the rules for philanthropy, largely through tax benefits for certain types of giving, and it may discriminate in an inefficient manner here too. If the tax rules are not tailored to reflect the relative merits of the different delivery mechanisms or providers, consumers will tend not to choose the product that is best for them, but rather the product that is favored by the government. The recipients of altruism may also be hurt, since they may receive less or lower quality aid than they would if the tax rules were nondiscriminatory.

The bottom line from this work is simple: companies exist to deliver value to employees, customers, and investors, and firms are providing these stakeholders increasing opportunities to satisfy their demand for altruism as a component of this value. Asking why firms produce altruism is like asking why Toyota produces the Camry or Apple produces the iPad. The answer is because there is consumer demand for it and the company is able to produce it at competitive cost.

C.

The final Manne-inspired work in this sequence involves the corporate provision of what my co-author, Salen Churi, and I are calling "trust." Trust is essential to human flourishing. It's written into our DNA: from birth we learn to trust our parents, who sustain us physically through our most vulnerable years. As we grow, we learn to trust all sorts of people and organizations for a broad range of things: we trust our cultural and religious institutions to provide good values; we trust the government to keep us safe from invading armies; and we trust brands like Whole Foods to supply us quality products. Trust is what makes modern society possible.

Trust allows us to cooperate with others, and cooperation is the way we get most things in life done. Trust frees us up and allows us to work together. All the big things we do involve collective action, whether it is putting a person on the moon or putting food on the table. We couldn't imagine our lives without trust. We could be alive, perhaps, but we wouldn't fully be human. Individualism is essential to human progress, but collective action is what enables individual achievement and fulfillment.

²⁸ Salen Churi & M. Todd Henderson, *Hacking Trust* (forthcoming).

Even Van Gogh or Beethoven would have been nothing if they could not trust their baker to provide them with their daily bread.

Being able to trust others to live up to their promises has enabled humans to become specialists, and this has generated enormous wealth. Adam Smith first appreciated this point, when he wrote about the gains possible when people can rely on others to do things they used to have to do for themselves. In a world with no trust, what Hobbes called the "state of nature," individuals have to grow their own food, build their own shelter, and make their own clothes. In this world, Henry Ford can't invent the assembly line, Bill Gates never gives us the PC, and Neil Armstrong doesn't walk on the moon. Each of them had to be able to trust others to do what they said they would do to be willing to invest in these pursuits. And, in these pursuits, each of them had to rely on thousands, if not millions, of strangers to live up to their promises. The network of trust to achieve our modern ambitions is staggeringly large and complex.

Trust gives us opportunities to expand our lives and human achievement, but, in a virtuous circle, these opportunities and this advancement beget the need for more trust. Small-scale levels of trust enabled our ancestors to move out of the cave and into the village. Once they emerged, our ancestors saw that massive gains that could be reaped from ever creating ever more trust. Therefore, they built trust-creating institutions as a means of generating wealth.

Our forager ancestors needed to be able to rely on more than just their parents, so they formed small tribes of people that could rely on one another. This had many practical benefits. In the most basic sense, twenty people do a better job warding off bandits or lions than just a handful. Having a larger group also allows greater division of labor—you can focus on hunting deer while your tribe-mate can specialize in turning those deer into clothing and food. Specialization offered the human mind the room to create new innovations that made life much more complex, and, for the most part, better. Over millennia, our ancestors formed new "tribes" to deal with ever-greater complexity.

These "trust tribes" come in all shapes and sizes. Religions, the city-state, nations, brands, the online star rating system, and, soon, the "blockchain," are all examples of tools of collective action designed to deliver trust at an ever-greater scale and complexity. A central claim of our forthcoming book is that for all their differences, the Catholic Church, McDonalds, and the U.S. government are largely in the same business—supplying trust to individuals to enable them to collaborate at lower cost than they otherwise could. To be sure, they sell other things too, be it salvation, burgers, or patriotism. But each of them also is in the business of supplying trust. These suppliers of trust enrich our lives and allow us greater freedom and efficiency in our day-to-day.

In this book, we'll examine the growing demand for trust and the ways these different mechanisms have supplied it. We believe that technology has brought us to a unique inflection point in human history, and that the rise of what we'll call the "digital tribe" has the potential to dramatically improve the way we live our lives. Technology startups, like Uber, AirBnB, and Digital Asset Holdings, have the potential to revolutionize our world in ways that will rival the time when our ancestors emerged from their caves.

We will make three central claims in the book. Our first claim is that there is not a single provider or type of provider of trust, but rather a market for trust, in which many types of entities offer many different mechanisms for creating trust. Trust is a product like anything else: individuals demand it, and producers of trust supply it in competition with each other. Unlike most other products, which can be self-produced, trust is something that only external parties can provide. One person can trust another on faith, but unless the other person to the transaction, or some neutral third party, is willing to certify in some way or guarantee performance, that faith is likely to be shaken on occasion. Unbonded trust is foolish in most instances, and given the potential trust offers, bonds of trust will be provided. Doing so makes both sides to a transaction better off. The gains to achieving this end is a profitable opportunity that will attract suppliers of trust.

The government can supply it, by providing courts and police that use the threat of violence to enforce contracts. You can trust that Susie will do what she says because the government will haul her off to jail or levy her property if she doesn't. The government may also guarantee performance ex ante, using licenses or requiring insurance. It may also regulate products or services to ensure a minimum quality. In all of these things, whether through courts or regulation, the government is largely in the trust creation business.

Private businesses can do most of these things, too. The Medicis created perhaps the first global brand to give some certainty to dealers in money and debt across Europe and beyond that their notes executed in Paris would be valid in Venice. Today, global brands like McDonalds and Microsoft provide a similar function. The companies behind these brands police quality within their supply chain, and offer amenities like warranties as means of building trust in their customers. Brand is perhaps the modern world's most powerful trust bond—one traveling abroad is more likely to trust a burger from McDonalds than a roadside stand for a quick bite in large part because of the power of brand.

Seen in this way, seemingly different things like regulation, brand, customer service, warranties, and reputation can all be thought of as on a spectrum of the supply of trust. This spectrum has evolved and been refined over time to meet a growing demand for trust, as the volume and complexity of transactions has increased dramatically. As we will see, the private provision of trust is significant, but it is limited in part because the government is not only a provider of trust services, but also a regulator of its competitors in this area. With the stroke of a pen, government could put

private businesses entirely out of the trust-providing business. For example, modern taxi companies, like Uber, are largely in the trust business—the taxi commission is its biggest rival—and moves to ban or limit Uber's business can be seen as regulation designed to kill competition for government in the trust business.

Our second claim is about the essential role technology plays in delivering trust. We are mostly interested in the impact of modern technology, like the microchip, the Internet, and block chain, will have on building the trust tribes of tomorrow, but our claim about the role of technology in creating trust applies to much more. Paper, the telephone, and the development of a body of contract and tort law are all examples of technologies that have helped build trust. Over the past hundred plus years, human society has seen an exponential growth in the amount of trust that exists, as these technologies have been deployed. We trust each other more today in part because there are paper records, because we can communicate at low cost at long distance, and because the courts and police stand ready to enforce our claims.

This virtuous feedback loop of trust and gains from trade fed by technology likely explains the growth of both government regulation and global brands in the past few decades. Consumer protection regulation and the reputation of businesses are in large part about ensuring greater levels of trust in an increasingly complex world. As Americans consume more food and use more products made in China or Vietnam, the need for assurances that these things are safe and will act as promised increases dramatically. The U.S. government has responded with new regulations and inspections, and businesses like Walmart, Proctor & Gamble, and Pfizer have put their name behind the products they offer. Importantly, these companies have also offered their own type of internal regulation, by policing their supply chain with regulations and inspections like those used by governments. Surely, we claim, the ability of global companies to do this work and have customers rely on it based on brand has forestalled additional government regulation.

Companies like eBay have gone even further. During a recent Cyber Monday, eBay processed over 10,000 transactions per second, facilitating the sale of innumerable types of products to strangers around the globe. Interestingly, eBay doesn't own any of these products but merely provides a place where these transactions can happen, as well as providing various government-like services. For example, eBay provides dispute resolution and payment verification. But, for our purposes, perhaps the most interesting thing it provides is the opportunity for all eBay users to contribute feedback about seller performance into a rating system that measures trust. In a world without eBay, the sale of a Hummel figurine by a collector in Singapore to a nostalgic hipster in San Francisco would not only be much more costly, but it might also require a regulatory apparatus that crossed borders. Instead, the rating system serves part of this role.

Instead of the seller investing to build a global brand or the government licensing sellers or guaranteeing a minimum quality, eBay used technology to let everyone contribute to regulation of sellers (and buyers). This approach has many virtues and some vices compared with government regulation or brand alone, and we will explore these in detail below. Our bottom line is that there is a need for all three types of regulation, but perhaps in much different amounts than we have today.

Our third claim is about the role new trust providers are playing in hacking old, monopolistic trust mechanisms to build the future of regulation. The future portends not only even more growth in the demand for trust as complexity continues apace, but also for a fundamental reshaping of the institutions that currently provide trust. New businesses are being created that are selling primarily trust, and these businesses have the potential to be a better trust mousetrap even for things we've historically thought of as solely the province of government.

Government regulation of some activities has been viewed as the only solution possible, imperfect as it is, for certain problems. Taxi cab regulation is an example. While critics pointed out as early as the 1970s the problems of government regulation, a deregulatory burst in the early 1980s proved a failure. The cities that got rid of taxi cab commissions and regulations in the early 1980s all reregulated by the early 1990s. No one at that time or today believed that government regulation was perfect or even optimal, but the alternatives, at least for cabs, was worse. Someone needed to provide the trust that getting into a stranger's car on a city street would be a safe and fair transaction, and the nature of the market was such that brand or other non-government mechanisms were unavailable. After all, a prospective rider doesn't have a lot of choice when hailing a cab, doesn't ride enough to form an attachment to a particular brand, or have enough at stake to sue if cheated.

These features of the market also limited political control over taxi regulators. No one, except the taxi cab owners, likely voted for local officials based on a cab-related issues, and regulators, being remote from political scrutiny, likely provided only the bare minimum in terms of matching regulation to customer demands. The familiar problems of bureaucracy, influence peddling, and regulators being captured by the regulated prevented regulators from providing the optimal level of trust and other types of regulation. Without a feedback mechanism, like the five-star rating system built by all members of the digital tribe, regulators didn't know what consumers wanted. And voters could do little about it.

Companies like Uber and Lyft disrupted this old regulatory model. In essence, when Uber launched, its target was not existing businesses, in the way that eBay was trying to take the business of antique sellers, private dealers, or even brick-and-mortar retailers. Instead, Uber's target was government. It was offering an alternative to the taxi commission. You see, both Uber and the taxi commission own no cabs, but rather offer a

regulatory or supervisory system designed to insure that independent taxi drivers provide a good service. Uber's value proposition was that they could be trusted more than government to ensure that drivers gave riders what they wanted—a clean, safe ride at a reasonable cost. Uber wanted to disrupt government regulation, rather than forestall additional government regulation.

But Uber isn't just a technological end run around regulation. It offered a mechanism through which its users could try to change the existing regulatory model. As noted above, the government is not just Uber's competitor here in providing trust, but also Uber's regulator. As seen in cities across the world, government has used its regulatory power to limit Uber's ability to compete. In response, Uber and its ilk have offered a technology-based solution to this potential abuse by the government monopoly. Each ride in an Uber results in a small payment to the regulator, that is, Uber the company, which then uses it in part to assert its position in battles over attempts to regulate it out of existence. In effect, Uber has tried to solve the rational apathy of taxi riders when it comes to political action by spreading the costs of lobbying across all users and embedding it in the price of the service. Uber also uses technology to build a democratic weapon in these political battles. Uber users are asked to fill out petitions, with the push of a button, which are then used to express to government the value its citizens have for Uber.

What Uber has done in both aspects of its business is link the amount and type of regulation it offers more closely with the customer experience. Government regulators are funded through taxes, which are paid by all citizens; while Uber's regulatory model is funded only by customers. Government regulators are beholden to all citizens, or, perhaps more realistically, the ones who vote or otherwise buy influence; while Uber is beholden only to its customers. Government moves to action, be it offering more or less or different regulation, only when there is enough political pressure to do so, only if the political dynamic is not corrupted, and, in any event, only within the boundaries of law and the Constitution. Such regulations will be slow and not tailored to the needs of customers. They may also be driven by the selfish interests of the cab owners or other stakeholders, as opposed to customers. Uber's model, on the other hand, is one of dynamic response, tailoring, and customer accountability.

This is not to say that the regulatory disruption promised by Uber is a panacea. We will explore some of the potential downsides to this approach in the chapters that follow, with the aim of offering a theory about when the disruption of existing regulatory models is a good thing and when it should trouble us as a society.

But one thing should be clear, our project is not a political one. In fact, we think that the current debates about the level of regulation in our society are stuck in a false dichotomy. Some on the political Left call for increased regulation, while some on the political Right call for less

regulation. We think they are both wrong. The question should not be whether we need more or less regulation—how should any politician or academic or person know such a thing?—but rather who should be deciding how much regulation we have.

Uber is again a great example. Although some would characterize Uber's service as deregulating the cab industry, in fact, Uber provides more regulation of the typical cab ride than the government. Uber tracks all rides by GPS and can know when a passenger has been long hauled. Uber uses ratings to not only kick drivers out of the system but to process instant Uber also rates passengers, which is rebates for bad experiences. something government could not possibly do or get away with if it could. These are additional "regulations" of drivers and riders, but they are provided by non-governmental actors. That Uber provides them suggests the demand for regulation in the cab business is actually greater than the current level provided by government. The problem then with taxi commissions is not excessive regulation but excessive government regulation. In those cases in which private business can be trusted to regulate, a locus of activity we hope to delineate, we should free up the market for regulation to allow this new form of regulation to flourish. If we do, we will move closer to the optimal level of regulation, be it more or less in a particular case, without the distorting effects of the political process.

IV.

We all owe Henry Manne a great debt. He had the courage to ask heterodox questions and take controversial positions. His work on insider trading is foundational for my own views and has been extremely influential in restraining the beast that could have devoured our securities markets. It is this work for which he is best known. But his work on corporate combinations was more important. He not only coined a phrase of common parlance among academics, judges, and policy makers, but he created an explanation for corporate activity that fundamentally shaped our understanding of corporate law and governance. I can't imagine thinking, writing, or teaching about corporate law, without Manne's concept of the market for corporate control. But, this isn't all. My own work is directly inspired by the questions Manne asked and his point of view about the world. Manne was not a knee-jerk critic of corporate behavior as many academics are, nor was he an advocate for aggressive reforms. Instead, he looked at the world as it was and tried to offer explanations for behaviors that others found puzzling or perverse. He was in the understanding and explaining business. In doing so, he made us see the world not just differently, but in a more profound and deep way.

HENRY MANNE AND NONPUBLIC COMPANY DISCLOSURE

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Houman B. Shadab*

This essay discusses Henry Manne's 1974 article, *Economic Aspects* of Required Disclosure Under Federal Securities Law, and its application to nonpublic disclosure regimes such as that applicable to hedge funds and startups crowdfunding capital under the Jumpstart Our Business Startups Act of 2012.

I. MANNE AND THE ECONOMICS OF DISCLOSURE REGULATION

In the *Economic Aspects of Required Disclosure Under Federal Securities Law*, Manne makes numerous broad critiques against mandatory securities disclosure in general and some specifics required by the Securities Act of 1933 ("Securities Act") and the Securities and Exchange Act of 1934 ("Exchange Act"). This section briefly summarizes key aspects of Manne's article.

Manne begins by noting that disclosure law has its roots in the narrowly tailored and low-cost common law fiduciary duties and 19th century incorporation acts that required disclosure of material facts.² In Manne's view, this "era of relative laissez-faire in the market for information about stocks" came to and end with the wide-ranging and detailed requirements found in the Securities Act and the Exchange Act. He observed that, at the time, economists had significant doubt about the whether the statutes resulted in optimal disclosures. Indeed, Manne notes that based on the best available evidence, there is no reason to believe that fraud was a significant problem prior to passage of the Securities Acts.⁴ Importantly, Manne notes, the fact that most companies listed on the New York Stock Exchange were voluntarily disclosing the most important type of information that was subsequently mandated indicates that competitive

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¹ Henry G. Manne, *Economic Aspects of Required Disclosure Under Federal Securities Law, in* Wall St. in Transition: The Emerging System and its Impact on the Economy 23 (Henry G. Manne & Ezra Solomon eds. 1974).

² *Id.* at 23.

³ *Id.* at 25.

⁴ *Id.* at 27. The lack of rampant securities fraud or market manipulation prior to the Great Depression has also been confirmed by recent research. *See* PAUL MAHONEY, WASTING A CRISIS: WHY SECURITIES REGULATION FAILS (2015).

pressures from investors required them to do so.⁵ Market forces were clearly at work in the market for information.

Manne criticizes the view that mandatory disclosure is non-regulatory, or non-substantive, due to it forcing companies to undertake activities that they would not otherwise.⁶ Manne notes, for example, that the Securities Act requires the disclosure of certain undertakings and that financial statements conform to generally accepted accounting principles—despite the fact that such are not universally undertaken or desirable.⁷

Manne attacks the public goods justification for mandatory disclosure, which holds that firms will voluntarily disclose a suboptimal amount of information because they cannot capture its benefits (which are dispersed widely among investors in a non-rivalrous manner). He first criticizes the public goods-efficiency justification for mandatory disclosure on the grounds that it may undermine productive efficiency by reducing the incentive to produce in the first place. He also argues that there is a related problem with placing questions about disclosure requirements and enforcement at the discretion of the Securities and Exchange Commission (SEC). More fundamentally, Manne argues against the public goods nature of financial information due to its rapid absorption into the prices of securities. Information is consumed by investors when it is disclosed, thereby becoming less valuable, and different, to those that fail to immediately trade upon it. This rationale would not apply to the extent securities are not publicly traded, such as private company shares.

Manne views mandatory disclosure for public companies as a form of anti-competitive rent-seeking, whereby incumbent firms gain an advantage by imposing regulatory requirements on existing and potential competitors that are less able to comply. As evidence of this phenomenon, Manne observes that the underwriting practices used by the leading Wall Street underwriters were essentially codified into the Securities Act. Accordingly, he argues, doing so placed Wall Street underwriters at a competitive advantage to smaller underwriting firms with different practices targeted to relatively high-risk issuers. He also notes the inherently regressive nature of mandatory disclosure, due to larger public companies, sell more shares than smaller ones, thereby better absorbing the disclosures costs applicable to both. Likewise, smaller companies that privately issue securities may be disproportionately impacted by mandatory disclosures due to generally being higher-risk than established firm and lacking audited financial

⁵ *Id.* at 23.

⁶ *Id.* at 29.

⁷ Manne, *supra* note 1, at 30.

⁸ *Id.* at 40-41.

⁹ *Id.* at 31-32.

¹⁰ *Id.* at 35-36.

¹¹ *Id.* at 48-49.

statements and a track record upon which to base their disclosures.¹² Whether or not firms actually use disclosure rules to benefit themselves at the expense of their competitors, it is important to note that mandatory disclosure has a competitive impact and produces both winners and losers.

In addition to the observation that any disclosure is costly, Manne notes that mandates may have broader costs because disclosures may have zero or negative value to investors. For example, he argues that most information mandated to be disclosed on Form S-1 for new issues is not valued by investors due to it being out of date. Manne notes an admission by a then-SEC commissioner that mandatory quarterly disclosures are not valuable due to much of the information being stale by the time it is disclosed. He criticizes the Securities Act more broadly on the grounds that it likely requires disclosure of irrelevant information and not information investors would want to know about. Prospectuses are unread because they are not useful, a result driven in part by the boilerplate language used to avoid liability.

All mandatory disclosure regimes suffer from a fundamental flaw in Manne's view in that no amount of information about the past can sufficiently predict the future—and hence investors' returns. ¹⁶ Implicit in these criticisms of mandatory disclosure is that, to the extent investors rely on the disclosure, a market for lemons is created. If the information is stale and has no value, investors cannot distinguish between good and bad firms, and will therefore discount all companies accordingly. The only benefits that Manne recognizes from Securities Act disclosures are providing the SEC with a powerful enforcement device, competitors with valuable information, and securities analysts with fodder for their research. ¹⁷

Another cost of mandatory disclosure is revealing irrelevant information that investors falsely believe is relevant, such as financial statements subject to the SEC's conservative accounting rules. ¹⁸ In this, Manne is implicitly arguing against a one-size-fits-all approach to accounting standards—even among public companies—and making an observation consistent with the large body of disclosure-based accounting research that has emerged in recent decades. Mandatory disclosure also places a cost on relatively less risk-averse investors seeking to invest in small, high-risk companies that are unable to make the disclosures required of public companies. ¹⁹

¹² Id. at 49.

¹³ *Id.* at 37.

¹⁴ *Id.* at 44-45.

¹⁵ *Id.* at 44-45, 47.

Manne, supra note 1, at 52.

¹⁷ *Id.* at 38-39.

¹⁸ *Id.* at 39, 43-44.

¹⁹ *Id.* at 50-51.

Manne also recognizes that regulation of public companies creates different disclosure regimes—public and private—each with relative costs and benefits.²⁰ Accordingly, he notes evidence supporting the theory that mandatory disclosure increases private placements due to its costs.²¹ And in recognizing the relative costs of being public or private, Manne notes that while private placements may generally be more attractive, a proposed SEC rule would have made them relatively less attractive compared to going public.²² When companies have a choice among disclosure regimes, the relative costs of disclosure matter.

Although not made explicit in Manne's article, he would likely oppose any form of mandatory disclosure on the basic economic grounds that the market for information is fundamentally functional. Given that at least some significant portion of investors demand disclosure, firms would disclose valuable information voluntarily, and efficient capital markets would set the proper price. Indeed, this is more likely the case now than it was when Manne was writing, due to the growing institutionalization—and hence sophistication—of public company investors.

II. THE ECONOMICS OF DISCLOSURE

The empirical and theoretical study of business disclosure, and related areas such as accounting standards and regulation, has grown into a vast space since the publication of Manne's 1974 article. The literature addresses issues relating to the nature, content, form, timing, costs and benefits, and law and standards of disclosure. In recent years, there have been several lengthy reviews of the vast literature.²³ This section summarizes general findings to give a broader context of Manne's article.

Extensive research has found that disclosure has benefits. Disclosure reduces information asymmetry by informing investors before they purchase securities. It also reduces agency costs while they remain investors.²⁴ Specific benefits from disclosure are increasing investors' willingness to purchase shares, a lower cost of capital, and higher market

²⁰ *Id.* at 47.

²¹ *Id.* at 47-48.

²² *Id.* at 48.

²³ See generally Christian Luez & Peter Wysocki, Economic Consequences of Financial Reporting and Disclosure Regulation: A Review and Suggestions for Future Research, 50 J. ACCT. & ECON. 525 (2016); Anne Beyer et al., The Financial Reporting Environment: Review of the Recent Literature, 50 J. ACCT. & ECON. 296 (2010). However, one area that seems severely underdeveloped is research about private company disclosures.

²⁴ Ann Gaeremynck & Mathijs Van Peteghem, *Costs and Benefits of Disclosure*, *in* THE ROUTLEDGE COMPANION TO ACCOUNTING, REPORTING AND REGULATION 144, 145 (Carien van Mourik & Peter Walton eds., 2014).

liquidity for securities.²⁵ These benefits generally apply to both equity holders and debt holders.²⁶ Driving these benefits is the fact that investors demand some level of disclosure and punish firms they deem opaque.²⁷ In new, entrepreneurial ventures, information asymmetry and agency costs may be particularly acute.²⁸ However, mandatory disclosure may be relatively ineffective and costly for such companies. They likely lack a track record, and disclosure is unable to reduce the radical uncertainty that surrounds new ventures.

Direct costs of disclosure include costs from obtaining, preparing, and publishing information.²⁹ These direct costs may have become lower in recent years through the adoption of information technology, however. Likewise, the SEC's mandate that companies use machine-readable language in financial disclosures in the form of the eXtensible Business Reporting Language may make such disclosures more useful to investors in terms of reducing information asymmetries and agency costs.³⁰

Indirect costs of disclosure include those from revealing proprietary information, verifying the information, and potentially exposing one's risk to litigation.³¹ In addition, mandatory disclosure seems to crowd-out private information production.³² It may also cause managers to focus on short-term goals or produce hard information at the expense of investment.³³ Short-term benefits from higher mandatory disclosure may be outweighed in the long run by better operating performance.³⁴

Theoretical research confirms that firms take into account costs and benefits when making disclosure decisions.³⁵ Accordingly, if firms have a

²⁵ Gaeremynck & Peteghem, *supra* note 24, at 145; Christof Beuselnick, Marc Deloof & Sophie Manigart, *Financial Reporting, Disclosure, and Corporate Governance, in* THE OXFORD HANDBOOK OF CORPORATE GOVERNANCE 290,292-93 (Mike Wright et al. eds., 2013).

²⁶ Gaeremynck & Peteghem, *supra* note 24, at 146.

²⁷ *Id.* at 145-46.

²⁸ Ronald J. Gilson, *Engineering a Venture Capital Market: Lessons from the American Experience*, 55 STAN L. REV. 1067, 1076 (2003).

²⁹ Gaeremynck & Peteghem, *supra* note 24, at 147-48.

³⁰ See, e.g., Joung W. Kim, Jee-Hae Lim & Won Gyun No, *The Effect of First Wave Mandatory XBRL Reporting Across the Financial Information Market*, 26 J. INFO. SYS. 127, (2012).

³¹ Gaeremynck & Peteghem, *supra* note 24, at 148; Beuselnick, Deloof & Manigart, *supra* note 25, at 294.

³² Ya Tang, *Information Disclosure and Price Discovery*, 19 J. FIN. MKTS. 39, 40 (2014); Brian J. Bushee & Christian Leuz, *Economic Consequences of SEC Disclosure Regulation: Evidence from the OTC Bulletin Board*, 39 J. ACCT. & ECON. 233, 261 (2005).

Alex Edmans, Mirko Heinle, & Chong Huang, *The Real Cost of Disclosure* 4 (Nat'l Bureau of Econ. Research, Working Paper No. 19420, 2013), http://www.nber.org/papers/w19420.

³⁴ Tim Jenkinson & Tarun Ramadorai, *Does One Size Fit All? The Consequences of Switching Markets with Different Regulatory Standards*, 19 Eur. Fin. MGMT. 852, 884-85 (2013).

³⁵ Paul M. Healy & Krishna G. Palepu, *Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature*, 31 J. ACCT. & ECON. 405, 406-07, 422 (2001).

choice between disclosure regimes, they will choose the most optimal from a cost-benefit perspective. Indeed, research has found that private offerings became more widely used after the passage of the Securities Act and Exchange Act.³⁶ This generally supports Manne's view that mandatory disclosure is cost prohibitive for some firms that would otherwise go public. Mahoney and Meil find little evidence that the 1930s securities acts reduced information asymmetry.³⁷

Mandatory disclosure is justified on numerous grounds, including to prevent opportunism by insiders, as a signal that the firm is willing to disclose both positive and negative information, to increase confidence in the markets, and to produce externalities in the form of valuable information about other companies.³⁸ For this last justification, information is viewed as a public good that creates free riders and, as with all such phenomenon, is insufficiently produced without regulation requiring its production (i.e., disclosure).³⁹ Mandatory disclosure is also justified on the grounds that it provides a commitment mechanism that voluntary disclosure cannot.⁴⁰

Overall, the benefits of disclosure at some point become limited, and may even cause harm, due to investors' cognitive limitations and behavioral biases. These include limited attention spans and confirmation bias.⁴¹

III. DISCLOSURE BY NONPUBLIC COMPANIES

A. The Three-Tiered SEC Disclosure Regime

The U.S. securities law disclosure regime has changed in many fundamental ways since Manne's article. Today, instead of public

³⁶ Gregg A. Jarrell, *The Economic Effects of Federal Regulation of the Market for New Security Issues*, 24 J.L. & ECON. 613 (1981); Jurgen Ernstberger, Benedikt Link, Michael Stich, & Oliver Vogler, *The Real Effects of Mandatory Quarterly Reporting*, (2016), http://ssrn.com/abstract=2604030 (finding "greater short-termism arising from increased reporting frequency").

³⁷ Paul G. Mahoney & Jianping Mei, *Mandatory vs. Contractual Disclosure in Securities markets: Evidence from the 1930s* 28 (Univ. of Va. L. Sch. The John M. Olin Prog. In L. & Econ. Working Paper Series, Paper 25, 2006).

³⁸ BEUSELNICK, DELOOF & MANIGART, *supra* note 25 at 296-97.

³⁹ Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 681 (1984); John C. Coffee Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 725 (1984).

⁴⁰ See Lin Cheng, Scott Liao & Haiwen Zhang, The Commitment Effect Versus Information Effect of Disclosure—Evidence from Smaller Reporting Companies, 88 ACCT. R. 1239 (2013).

⁴¹ Susanna Kim Ripken, *The Dangers and Drawbacks of the Disclosure Antidote Toward a More Substantive Approach to Securities Regulation*, 58 BAYLOR L. REV. 139, 160-90 (2006). *See generally* OMRI BEN-SHAHAR & CARL E. SCHNEIDER, MORE THAN YOU WANTED TO KNOW: THE FAILURE OF MANDATED DISCLOSURE (2014).

companies being subject to wide-ranging disclosure rules and private companies subject to comparatively none, there are three broad disclosures regimes:

- pure private placements (to accredited investors);⁴²
- a middle-tier that consists of an IPO on-ramp process for emerging growth companies, a "mini-IPO" under so-called "Regulation A+," and crowdfunding; ⁴³ and
- \bullet $\,$ full-blown public registration subject to federal securities law and exchange listing requirements.

The JOBS Act created all three categories in the middle tier. They are characterized by small companies not being required to file a public-company registration statement with the SEC, yet nonetheless being subject to significant mandatory disclosures at the time of offering, and potentially periodic reporting as well. Overall, the JOBS Act reduced the disclosure obligations for companies seeking to raise funds outside of the confines of a private offering.

Title I of the JOBS Act created a new category of companies under the Securities Act known as an "emerging growth company" (EGCs) that have less than \$1 billion in revenues in their most recent fiscal year. The purpose is to create an extended IPO on-ramp process for growing companies that gives them additional time to adopt the full disclosure and accounting requirements of a public company. Although an EGC must submit a draft IPO registration statement confidentially to the SEC, an EGC only needs to make scaled disclosures. Among other reduced disclosures, an EGC does not need to include certain financial information for periods before those presented for the IPO, is not required to disclose the relationship between executive compensation and financial performance, and does not need to obtain auditor attestation to internal controls.

Under what is widely referred to as "Reg A+," Title IV of the JOBS Act allows companies to undertake a "mini-IPO" to raise up to \$50 million from the public without being required to comply with the full range of disclosure and other SEC obligations. Companies are permitted to raise up to \$50 million from freely tradable securities in any twelve month period. However, under Reg A+, companies are required to file an offering circular with audited financial statements to the SEC. Under Reg A+ companies are

 $^{^{42}}$ For example, under the widely used Regulation D exemption, there are no limits on offering amounts and preempts state regulation.

⁴³ Supporting these types of quasi-public companies is the JOBS Act increasing the existing threshold from 500 to 2000 investors before imposing mandatory Exchange Act periodic reporting and other requirements on a company.

also permitted to "test the waters" to determine interest in their offering before making any filings. This helps companies by reducing the risks of bearing substantial costs only to make a failed offering.

Title III of the JOBS Act created an entirely new regime designed to enable equity and debt crowdfunding. A company can raise funds by selling an unlimited number of unregistered securities to the public—not just wealthy or sophisticated accredited investors. In any 12-month period, the rules limit a company to raising \$1 million and limit ordinary investors to investing no more than \$100,000. Crowdfunding companies must file Form C containing extensive disclosures, including about issuer's business. its capital structure, how its securities were valued, and a narrative of its financial condition. Companies making a first-time crowdfunding offering of more than \$500,000, but not more than \$1 million, are not required to produce audited financial statements due to the SEC's recognition, in response to public comments, of the costs involved. Companies raising less than \$500,000 in a crowdfunding need only produce financial statement reviewed by an independent accountant or certified by the company's CEO. In theory, the crowdfunding rules enable small companies to raise small amounts of funds from numerous investors without costly registration and compliance requirements.

B. Case Study of Private Disclosures: Hedge Fund Disclosures

Given that Manne would likely support at most an extremely limited regime common-law driven mandatory disclosure, it is worth exploring what disclosures would be made by companies to sophisticated yet passive investors seeking to buy and hold shares in a diversified portfolio. The disclosures made by startups to venture capital firms are extensive, frequent, and voluntary. However, they are made in the relatively unique circumstance of a new company seeking not just capital but also the substantive expertise and professional networks provided by VCs. Startups' disclosures to VCs are accordingly likely not representative of what voluntary disclosures to investors would look like without mandates.

The disclosure practices of hedge funds seem to provide a better case study than startups. Hedge fund investors, as limited partners, are ultimately passive investors that do not participate in any management decisions. Accordingly, the disclosures made by hedge funds may better approximate the type that would be made by companies under a regime without mandatory disclosure where investors are sophisticated yet passive.

Notably, hedge fund investors have strong preferences about disclosure. Investors seek disclosures about risk that are comprehensive, intelligible, and anywhere from monthly to real-time. Investors desire detailed and frequent performance reporting, and to have the fund precisely identify the fund's investment strategy, so as to monitor the manager's investments and prevent a deviation from the fund's stated strategy. In

practice, an estimated 89 percent of hedge funds make at least monthly disclosures to investors.⁴⁴ In addition to performance, these disclosures typically describe what returns were attributable to a given strategy and various measures of risk-adjusted performance. Since the financial crisis of 2008, hedge fund investors have been receiving greater disclosures and more transparency from hedge funds. Hedge fund investors demand higher quality operational practices when they perceive a fund to be organized in a jurisdiction with lax enforcement or if the fund is less established. Investors also price in the risk of fraud and other operational problems by paying lower fees to funds with weaker operational practices.

The voluntary disclosures by hedge funds to their sophisticated investors seem to confirm a basic proposition supported by Manne's article; namely, regulation is not required for high-quality disclosures to take place.

C. The Crowdfunding Disclosure Regime and Manne's Disclosure Critique

As a form of middle-tier mandatory disclosure, companies raising funds under any of the three regimes created by the JOBS Act are subject to greater disclosure requirements and other restrictions than standard private placements. For this reason alone, their disclosure may not be optimal under Manne's framework simply because they do not reflect what would be made under a pure make-for information. For example, unlike nonpublic companies raising capital through traditional private offerings, crowdfunded firms must disclose their capital structure, use of offering proceeds, and a narrative discussion of their financial condition. They must also amend Form C to disclose any material changes and make annual Private placements typically do not have periodic reporting requirements or place limits on the amounts able to be raised by companies. Unlike private placement, crowdfunding securities potentially impose strict liability on funding platforms, companies, and individual officers and directors. As Manne would note, this likely reduces the usefulness of their disclosures due to fear of liability.

In accordance with Manne's view, the middle-tier disclosure regime created by the JOBS Act⁴⁵ may also have a competitive impact. The JOBS Act was signed into law by President Obama on April 5, 2012. The interest groups behind the Act included a wide range of small businesses, entrepreneurs, technology industry participants, and investors. Because the Act is best viewed as a reduction in regulation, Manne's understanding of rent-seeking regulation does not apply with respective to the public

⁴⁴ PRICEWATERHOUSECOOPERS, TRANSPARENCY VERSUS RETURNS: THE INSTITUTIONAL INVESTOR VIEW OF ALTERNATIVE ASSETS 50 (March 2008).

⁴⁵ Jumpstart Our Business Startups Act, 112 P.L. 106, 126 Stat. 306 (2012).

company, non-public company divide. However, Manne's theory of competitive disclosure may apply as between private companies. In theory, at least, private companies have a broad range of potential financing options available to them, including traditional venture capital (VC) firms under a pure private offering, as well as crowdfunding under middle-tier disclosure. In principle, VCs compete with the public to fund new ventures. A trade publication noted this potential competition:

When equity-based Crowdfund investing first came on the scene earlier this year, there was talk of how it might possibly "crowd out" venture capitalists. While historically venture capital firms and angel investors have been the dominant force in early stage financing for startups, Crowdfund investing, legalized by this year's JOBS Act, is yet another funding mechanism that will bring a whole new class of investors into the capital markets In recent years, VC firms have been criticized for lackluster performance, with only half of funded startups yielding a return, and although \$30 billion has gone into venture-backed companies in the U.S. this year, venture capital investments have not outperformed the equity markets in more than a decade . . . However, with increasing competition from incubators/accelerators and now equity-based Crowdfund investing, some feel uncertain about the future of traditional VC and angel investing. The fact is that the startup ecosystem is changing due to major competition. All this raises the question: will Crowdfunding be a direct competitor with venture capital and angel investors? 46

Anecdotally, VCs have criticized Title III of the JOBS Act as creating a regime for only the poorest quality companies of raise funds. Notably, not a single prominent VC firm filed a comment to the SEC in support of the agency's crowdfunding proposal or submitted any recommendations on how to reform the proposal's overly restrictive provisions. Accordingly, under Manne's competition theory of mandatory disclosure, VCs may be losers if crowdfunding takes off and takes away potential startups for VCs to invest in.

Although crowdfunding is subject to less disclosure requirements than public companies, a lingering question from Manne's analysis is whether an even less onerous crowdfunding disclosure regime is desirable. Based on the experience of U.K.-based crowdfunding, the answer seems to be "yes." The U.K. equity crowdfunding market raised nearly \$2 billion in 2014 alone with fraud being a very rare occurrence. This is despite the fact that U.K. crowdfunding is subject to a much lighter disclosure and regulatory regime than that under the JOBS Act. Although U.K. authorities require startups using crowdfunding portals to disclose important information about themselves and monitor their disclosures, the U.K. regime does not require the disclosure of any specific information and does not impose periodic

⁴⁶ Simon Erblich, *Crowdfunding: Threat or Opportunity for Venture Capitalists and Angel Investors?*, RED HERRING (Dec. 6, 2012), http://www.redherring.com/top-stories/crowdfunding-threat-or-opportunity-for-venture-capitalists-and-angel-investors/.

⁴⁷ Global Crowdfunding Market now Worth \$30 Billion CONSULTANCY UK (Sept. 14, 2015), http://www.consultancy.uk/news/2593/global-crowdfunding-market-now-worth-30-billion.

reporting requirements.⁴⁸ Instead of mandatory disclosure, U.K. crowdfunding portals help determine what startups using their platform should disclose based on the costs and benefits of disclosure as well as demand from investors.

CONCLUSION

Even four decades after the publication of Manne's article criticizing mandatory disclosure, the issues raised and arguments made are still relevant. The impact and proper regulation of disclosure remains an open question today. By contrast, less of an open question is the appropriateness of one-size-fits are disclosure regimes. With the rise of disclosure regimes for startups and other methods of allocating capital outside the framework of a full-blown public company regulatory regime, the securities acts that Manne criticized are becoming increasingly antiquated in retrospect.

⁴⁸ Financial Conduct Authority, A Review of the Regulatory Regime for Crowdfunding and the Promotion of Non-readily Realisable Securities by other Media, FINANCIAL CONDUCT AUTHORITY 1, 6-9 (2015), http://www.fca.org.uk/static/documents/crowdfunding-review.pdf. See also Engine Advocacy, Financing the New Innovation Economy: Making Investment Crowdfunding Work Better for Startups and Investors, ENGINE 1,19-21 (Oct. 2015),

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