

University of Illinois College of Law
Law and Economics Working Papers

Year 2006

Paper 53

Outsider Trading as an Incentive Device

Larry E. Ribstein*

Bruce H. Kobayashi†

*University of Illinois, ribstein@law.uiuc.edu

†George Mason University School of Law, bkobayas@gmu.edu

This working paper is hosted by The Berkeley Electronic Press (bepress) and may not be commercially reproduced without the permission of the copyright holder.

<http://law.bepress.com/uiuclwps/art53>

Copyright ©2006 by the authors.

Outsider Trading as an Incentive Device

Larry E. Ribstein and Bruce H. Kobayashi

Abstract

Outsiders often have and seek to trade on material nonpublic information about firms. For example, lawyers have traded on advance information about the filing of a lawsuit, a social activist has announced a plan to trade on advance information of a boycott, and a hedge fund operator has engaged in a controversial trading maneuver in a control contest. Trading on nonpublic information is generally permitted if the information was not misappropriated or accompanied by fraud or manipulation or other misconduct. However, recent public focus on the above transactions signals possible regulation in some specific outsider trading situations. More generally, Ayres and Choi propose giving firms broad rights to decide whether outsider trading in their stocks will be regulated. We argue against broad regulation on the basis that outsider trading can provide incentives for socially beneficial conduct. In particular, outsider trading provides an important way to capitalize on investments in intellectual property that are not otherwise protected by the intellectual property laws. Understanding of these benefits is crucial in determining the appropriate limits of regulation.

OUTSIDER TRADING AS AN INCENTIVE DEVICE

Bruce H. Kobayashi & Larry E. Ribstein*

March 2, 2006

Abstract

Outsiders often have and seek to trade on material nonpublic information about firms. For example, lawyers have traded on advance information about the filing of a lawsuit, a social activist has announced a plan to trade on advance information of a boycott, and a hedge fund operator has engaged in a controversial trading maneuver in a control contest. Trading on nonpublic information is generally permitted if the information was not misappropriated or accompanied by fraud or manipulation or other misconduct. However, recent public focus on the above transactions signals possible regulation in some specific outsider trading situations. More generally, Ayres and Choi propose giving firms broad rights to decide whether outsider trading in their stocks will be regulated. We argue against broad regulation on the basis that outsider trading can provide incentives for socially beneficial conduct. In particular, outsider trading provides an important way to capitalize on investments in intellectual property that are not otherwise protected by the intellectual property laws. Understanding of these benefits is crucial in determining the appropriate limits of regulation.

* Associate Dean for Academic Affairs and Professor of Law, George Mason University School of Law, and Richard & Marie Corman Professor of Law University of Illinois College of Law. The paper benefited from helpful comments from D. Bruce Johnsen, Henry Manne, and seminar participants at the Midwestern Law and Economics Association Meetings, Chapman University, and the Interdisciplinary Center for Economic Science at George Mason University.

Table of Contents

OUTSIDER TRADING AS AN INCENTIVE DEVICE	1
I. THE BENEFITS OF OUTSIDER TRADING	9
A. PROTECTING INFORMATION AND INTELLECTUAL PROPERTY	9
B. ENCOURAGING MONITORING AND EXTERNAL DISCIPLINE	13
II. SPECIFIC OUTSIDER TRADING INCENTIVE DEVICES	14
A. CONTROL TRANSACTIONS	14
B. MARKET ENTRY AND ANTITRUST	20
C. LAWSUITS	23
1. Information effects of the lawsuit	24
2. Positive incentive effects of outsider trading	25
3. Perverse incentive effects	30
4. The Terayon example	32
D. BOYCOTT	34
E. WHISTLEBLOWING	35
F. TRADING ON ADVANCE KNOWLEDGE OF CONTRACTS	37
III. ANALYZING ARGUMENTS FOR REGULATING OUTSIDER TRADING	40
A. PROTECTION AGAINST MISAPPROPRIATION	40
B. INCREASED BID-ASK SPREADS	41
C. EXCESSIVE SEARCH	43
D. INCENTIVES TO COMMIT BAD ACTS	44
1. Sabotage	44
2. Fraud and manipulation	45
3. Perverse management incentives	45
IV. BALANCING THE CONSIDERATIONS	46
V. CONCLUDING REMARKS	48

Regulation of trading on non-public information has long searched for a rationale. The law initially was concerned that any exploitation of an information advantage was unfair.¹ Broad regulation, however, conflicted with the need for a more nuanced approach based on the social benefits of enforcing property rights in information. Production and dissemination of information promote market efficiency. Thus, one who invests resources in developing information ordinarily should be able to capitalize on the information by trading on it. In other words, property rights in information serve the same function as rights in other property.²

Consistent with the property rights approach,³ the Supreme Court initially backed off the broad unfairness approach⁴ and then embraced a positive theory of liability based on misappropriation of information from its owner.⁵ It follows from the misappropriation theory that there is a general right to trade on “outside” information – i.e., information generated outside the company whose shares are traded – as long as the trader does not use information provided by someone else or violate other laws such as those against fraud or manipulation.

This broad authorization of outsider trading has, however, come under attack. Recent controversy has focused on particular forms of what seem to be manipulative or opportunistic outsider trading. Martin & Partnoy discuss what they call the problem of “encumbered shares” – that is, shares that are voted by someone who does not have the full economic interest, as where the shares are offset by a short position.⁶ There have been allegations of “vote buying,” or separating votes from economic ownership, has been tried in some corporate elections, such as by hedge fund manager Richard Perry in connection with Mylan Laboratories’ takeover of King Pharmaceuticals, and the HP acquisition of Compaq.⁷ Such concerns have led to proposals to regulate such vote buying, including direct limits on voting rights, regulation of the voting mechanism, and reform of the disclosure system to cover the “hidden ownership” of voting rights.⁸ There

¹ See *Cady, Roberts & Co.*, 40 S.E.C. 907 (1961).

² See Frank H. Easterbrook, *Insider Trading, Secret Agents, Evidentiary Privileges, and the Production of Information*, 1981 SUP. CT. REV. 309 (1981).

³ See Larry E. Ribstein, *Federalism and Insider Trading*, 6 SUP. CT. ECON. REV. 123 (1998) (analyzing the misappropriation theory from a property rights perspective).

⁴ See *Chiarella v. U.S.*, 445 U.S. 222 (1980); *Dirks v. S.E.C.*, 463 U.S. 646 (1983).

⁵ See *U.S. v. O’Hagan*, 521 U.S. 642 (1997). Although the misappropriation theory is generally consistent with the property rights approach, the theory is awkwardly qualified by the federal protection-of-investors rationale that motivated the initial unfairness theory. Thus, information owners may not be able to authorize its use. See Ribstein, *supra* note 3.

⁶ Shaun P. Martin & Frank Partnoy, *Encumbered Shares*, 2005 ILLINOIS L. REV. __ (2005).

⁷ See David Skeel, *Behind the Hedge*, LEGAL AFFAIRS (Nov./Dec. 2005) available at http://www.legalaffairs.org/issues/November-December-2005/feature_skeel_novdec05.msp.

⁸ See Martin & Partnoy, *supra* note 6; Henry T. C. Hu & Bernard Black, *Hedge Funds, Insiders, and Decoupling of Economic and Voting Ownership in Public Companies*, European Corporate

have also been incidents of “dumping and suing,” in which a class action plaintiff or his lawyer shorts shares of a litigation target prior to suing.⁹ In all of these cases, the alleged problem with the outsider trading is not the information advantage the trader has over the rest of the market, but the fact that the trader is perceived to be using his shareholder voting or suing powers contrary to the corporation’s interests.

More generally, outsider trading has been viewed as imposing social costs or inviting socially costly behavior. Thus, Ayres & Choi have proposed broader regulation of outsider trading by delegating to traded firms the power to decide when trading in their shares is illegal.¹⁰ Ayres & Choi justify their rule by pointing to potential costs that may result from general authorization of outsider trading, including increasing the trading costs of uninformed outsiders, provoking premature disclosure by issuers, and encouraging excessive investments in information. They argue that delegating regulatory authority to the traded firm would better internalize the costs of outsider trading than the current rule, which broadly authorizes such trading. Ayres & Bankman would extend the regulation of outsider trading to reach situations where insiders can trade on their knowledge through “substitute” transactions in other companies.¹¹

Despite these alleged problems, we question the efficiency of broadly proscribing outsider trading. We show how outsider trading can contribute to social welfare by giving traders incentives to engage in the socially productive activities that generate the information. Without the ability to trade in securities markets on their information, the traders may be unable to full internalize the benefits of their activities, with the result that these activities may be under-produced. In particular, outside traders provide an important disciplinary effect on firms through their trading on negative information, both by selling the relevant firm and by trading in related firms.

The incentive theory of outsider trading is analogous to an important defense of insider trading as a managerial compensation device first proposed by Henry Manne¹² and later developed by Carlton & Fischel.¹³ As Carlton & Fischel observe:

Insider trading may present a solution to [the] cost-of-renegotiation dilemma. The unique advantage of insider trading is that it allows a manager to alter his compensation package in light of new knowledge, thereby avoiding continual renegotiation. The manager . . . in effect "renegotiates" each time he trades. This in turn increases the manager's incentive to acquire and develop valuable information in the first place (as well as to invest in firm-specific human

Governance Institute Law Working Paper No. 56/2006 (2006).

⁹ See Moin Yahya, *The Legal Status of ‘Dump and Sue’*, _ SUFFOLK UNIV. L. REV. (2005 forthcoming), working paper version available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=683341.

¹⁰ See Ian Ayres & Stephen Choi, *Internalizing Outsider Trading*, 101 MICH. L. REV. 313 (2002).

¹¹ Ian Ayres & Joseph Bankman, *Substitutes for Insider Trading*, 54 STAN. L. REV. 235 (2001).

¹² See Henry G. Manne, *INSIDER TRADING AND THE STOCK MARKET* (1966).

¹³ See Dennis W. Carlton & Daniel R. Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857 (1983).

capital).¹⁴

Manne has recently pointed out, in explaining why firms did not bar insider trading before regulation was imposed by federal law:¹⁵

If insider trading were legal and used to replace stock options, there would be no “tragedies” of employees being left high and dry with options way out of the money. There would be no loss of reward when an innovation merely resulted in a reduction of an expected loss. There would be no unearned gain because a company’s stock appreciates in line with a market or industry rise. There would be no disappointments about the number of shares optioned or granted to particular employees. There would be none of this absurd business of renegotiating the option plan every time the stock takes a nosedive. And there would be no peculiar problems of accounting, since there would be no reason to put the right of employees to trade on undisclosed information on the company’s balance sheet at all: such trading would be entirely extraneous to the company’s accounts. In short, insider trading can be viewed as a way to use efficient capital markets to precisely capitalize and reward insiders’ efforts.

This focus on the incentive effects of outsider trading meshes with our prior work on the use of quasi-property rights to provide incentives for socially valuable conduct. One of us has analyzed lawyer licensing as a mechanism for encouraging lawyers’ participation in lawmaking by giving lawyers exclusive rights to the law of the states in which they are licensed.¹⁶ We extended that theory by showing how fee awards in class action cases should reward class action lawyers’ contribution to lawmaking through their pleadings.¹⁷ The current paper shows how limiting the traded firm’s property rights to information, thereby allowing outsiders to appropriate informational rents via speculative mechanisms, can provide an efficient compensation device because of the capital markets’ ability to monetize the value of specific activities.

We show that some types of outsider trading – specifically including sales and short sales – can be useful in providing external discipline for firms and their managers. Moreover, because of the disciplinary effects of this trading, the traded firms and their managers should not be given a right to bar it.¹⁸ Indeed, Ayres & Choi would exempt

¹⁴ *Id.* at 870-71.

¹⁵ See Henry G. Manne, *Insider Trading: Hayek, Virtual Markets, and the Dog that Did Not Bark*, (March 2005), ICER Working Paper No. 7-2005, available at <http://ssrn.com/abstract=679662>, forthcoming J. Corp. L.

¹⁶ See Larry E. Ribstein, *Lawyers as Lawmakers: A Theory of Lawyer Licensing*, 69 MO. L. REV. 299 (2004).

¹⁷ See Bruce H. Kobayashi & Larry E. Ribstein, *Class Action Lawyers as Lawmakers* (with Kobayashi), 46 ARIZ. L. REV. 733 (2004).

¹⁸ For an analogous argument against regulating insiders’ short sales, see Thomas A Lambert, *Overvalued Equity and the Case for an Asymmetric Insider Trading Regime*, U. Missouri Columbia working paper (2006).

short sales from their proposal.¹⁹ Thus, our theory provides a strong argument against regulating at least these forms of outsider trading. The positive incentive effects of outsider trading are not limited to sales. There are many situations in which outsiders' stock purchasers enable them to capitalize on socially productive activities, including investments in information. The classic example is outsider purchases of control through tender offers and otherwise.²⁰ Indeed, all informed outsider trading may increase market efficiency. The most effective way to minimize the effect of these biases is to ensure that informed traders have opportunities to correct investors' mistakes through arbitrage. As outsider trading such as control purchases is increasingly regulated, informed outsiders may have to employ more sophisticated tactics to capitalize on their information. These positive incentive effects should be balanced against any negative externalities resulting from outsider trading before deciding to ban or regulate this trading. in mind before they attempt to regulate these additional devices.

In order to focus the analysis, we discuss several specific situations that illustrate how outsider trading that can function as a device for compensating socially beneficial conduct:

A owns shares both in Firm and in Bidder, which is attempting to take control of Firm. Firm's shares can be expected to rise, and Bidder's to fall, if the Bid is successful. A contracts to sell Bidder's shares at the current market price, but retains the right to vote these shares for the takeover. A does vote these shares, as a result of which the bid is successful and A's shares in Firm rise.

B enters a market dominated by Firm. The new competition may produce social efficiency that B does not internalize. Without considering the possibility of outsider trading, B's costs may be too high to justify entering the market, particularly if B can expect Firm to undertake action such as price-cutting in response to entry. The market therefore does not expect B to enter, and Firm's shares can be expected to decline if B enters. B shorts Firm's shares, then enters the market and buys Firm's shares at a lower price that reflects the competition.²¹ The trading gains make it profitable for B to enter the market.

C shorts Firm's shares knowing that he plans to file a class action lawsuit against Firm that may trigger costly remedies against the corporation, as well as significant direct and indirect litigation expense and reputational cost. Prior to filing of the suit, firm's stock price does not fully reflect either the fact of the suit or the additional facts about wrongdoing alleged in the complaint. The lawsuit produces socially beneficial deterrence. However, without considering potential stock trading gains the suit may not be privately optimal for C or his lawyer because of the cost and risk of the suit. C or his lawyer sues Firm and buys Firm's shares at a reduced price after filing suit to cover his short position.

¹⁹ See Ayres & Choi, *supra* note 10.

²⁰ See Daniel R. Fischel, *From MITE to CTS: State Antitakeover Statutes, the Williams Act, the Commerce Clause, and Insider Trading*, 1987 SUP. CT. REV. 47 (1987).

²¹ See Robert G. Hansen & John R. Lott, Jr., *Profiting from Induced Changes in Competitors' Market Values: The Case of Entry and Entry Deterrence*, 43 J. INDUS. ECON. 261 (1995) (discussing this scenario).

Because of these trading gains the lawsuit is privately beneficial for C.²²

D plans to organize a boycott of Firm's products to punish or call attention to Firm's socially harmful acts. The boycott would be socially beneficial, but because of high coordination costs D cannot fund the organization of the boycott without taking into account potential stock trading gains. D shorts Firm's shares prior to announcing the boycott, then announces the boycott and purchases the shares at a price reduced by the boycott announcement. The trading gains make it beneficial for D to organize the boycott.²³

E, a current or past employee of Firm who is not technically an insider for insider trading purposes trades Firm's shares by selling short or from an existing inventory on the advance knowledge that E plans to make public a fraud or crime or other embarrassing facts that E knows about by virtue of being an employee. Disclosure of the wrong is socially productive because it facilitates prosecution and therefore deterrence of the wrong, and because disclosure aligns the firm's stock price with the actual value of its assets. Because E may be fired for the disclosure, E might not disclose even if he faces a risk of prosecution for failing to do so. However, the potential for trading gains makes the disclosure privately optimal for E, and he makes the disclosure.

F considers whether to enter into a material contract with Firm that can be expected to increase the price of F's shares. The contract or its cancellation may produce social value that may not be internalized in the contract price without considering the possibility of outsider trading. The market therefore does not expect F or a comparable party to enter into the contract, and the market values Firm's shares accordingly. F, or its employees with F's permission, trades on advance knowledge of the contract event and sells thereafter. The trading gains make it profitable for F to enter into the contract even if this would not have been the case in the absence of trading.

In all of these situations, people trade on information they generated, so there is no misappropriation. The only possible exception is E, where there is at least a strong argument that Firm does not "own" information about its illegal or embarrassing acts.²⁴ There may, however, be arguments why the trading should not be permitted, including excessive search, increased bid-ask spreads for uninformed traders, and creating perverse incentives to engage in socially destructive acts such as sabotage or lying.²⁵ However, we show that the negative externalities associated with outsider trading are certainly no larger, and probably smaller, than the positive incentive effects we identify. Moreover, many of the possible harms from allowing outsider trading are addressed by current laws, including those against fraud, antitrust violations, manipulation and specific harmful acts. Specific rules can deal with particular harms associated with outsider trading.

The article proceeds as follows. Part I discusses the general theory of why outsider trading can be beneficial. It focuses on the social benefits of outsider trading as a

²² This is the "dumping and suing" scenario outlined by Yahya, *supra* note 9.

²³ See Larry E. Ribstein, *Investment Activist's Attack On Coca-Cola Company Stock May Leave Bitter Aftertaste*, Washington Legal Foundation Legal Opinion Letter, Vol. 15 No. 2 (January 28, 2005).

²⁴ See *infra* subpart II.E. (discussing *Dirks*).

²⁵ See *infra* Part III (discussing these arguments).

way to provide incentives both for information search and for other socially productive activities that produce information as a byproduct. Any regulation of outsider trading must take account of these benefits. Part II focuses on the benefits and alleged costs of outsider trading in the scenarios identified above.

Part III analyzes arguments for broader regulation of outsider trading. It begins by showing how the law has gradually expanded from regulation of classical insider trading to regulation of misappropriation, coupled with isolated regulation of outsider trading under takeover law and Regulation FD. However, there is currently no broad regulation of the outsider trading merely on the basis of unequal information – indeed, the Supreme Court cases over the last 25 years have explicitly held that such regulation would be outside the scope of general antifraud laws. Part III shows that the proposed rationales for expanding outsider trading liability are dubious for many types of outsider trading. Moreover, these rationales must be balanced against the benefits of outsider that would be lost as a result of broader regulation.

Part IV considers what regulatory approach would best reflect the above considerations. The above analysis indicates that expanding regulation beyond current law would quash incentives to engage in productive activity with little payoff in reducing harmful activities beyond what could be accomplished even without outsider trading regulation. Moreover, the rationales for expanding current regulation do not suggest clear regulatory limits. The only coherent proposal for establishing those limits is Ayres and Choi's suggestion that the right to regulate the activity be delegated to the firms whose stock is traded. However, this approach does not internalize the costs and benefits of outsider trading as Ayres & Choi argue because of corporate managers' perverse incentives to block many of the types of outsider trading that would be subject to this proposal. In short, this article concludes that there should be no regulation of outsider trading beyond what is currently imposed. Indeed, this article's analysis casts significant doubt on the efficiency of much of the current regulation of outsider trading. Part V concludes

I. THE BENEFITS OF OUTSIDER TRADING

The basic argument against regulating outsider trading is that such trading often may be the best way to enable parties to internalize the benefits of socially productive activity. In other words, without the ability to capitalize on information produced in these activities, there may be a socially suboptimal amount of such conduct. Subpart A discusses production of information, while subpart B discusses how protecting trading encourages other types of activities that produce the information as a byproduct.

A. PROTECTING INFORMATION AND INTELLECTUAL PROPERTY

Most of the socially beneficial conduct encouraged by outsider trading directly or indirectly involves production of information. The initial question, therefore, is why additional incentives are necessary given the existence of intellectual property laws designed to protect the rights of creators.

Intellectual property rights reflect tradeoffs between the need to encourage productive activity and the need to avoid over-protection of intellectual property, which can prevent the efficient use of information and discourage subsequent creative activity.²⁶

²⁶ See generally, Easterbrook, *supra* note 2 at _.

For example, federal law protects novel and non-obvious ideas through the patent laws²⁷ and original works through the copyright laws.²⁸ These laws give firms and individuals incentives to invest in producing and disseminating information.²⁹ But intellectual property rights are more limited than rights in other forms of property. Information has the public good attribute that, once it is produced, everyone can benefit without reducing others' enjoyment. It also may have public goods' non-excludability characteristic, depending on the existence and strength of property rights in information.³⁰ Intellectual property rights therefore may reduce socially beneficial access to information even as they increase the amount of information that is produced. Moreover, intellectual property rights that encourage initial creation may be so broad that they discourage later creation of similar ideas, or creation of new ideas that improve upon the original idea.

As a result of these tradeoffs between use and creation, intellectual property rights are limited in both scope and duration.³¹ Thus, a patent lasts 20 years from the time of filing and only covers ideas that meet the standards of patentability. Copyright lasts for the life of the author plus seventy years but protects only original expression and not ideas or facts. Expanding copyright protection to ideas or to cover independent creation would increase the cost of expression and inefficiently suppress the production of new works.³² Moreover, copyright law recognizes fair uses,³³ and patent law contains explicit provisions allowing experimental use under certain circumstances.³⁴ Reverse engineering is explicitly allowed under trade secret law,³⁵ the semiconductor chip protection act,³⁶ and under provisions of the Digital Millennium Copyright Act.³⁷

Intellectual property rights go further than the above protection in limited circumstances where it is necessary to protect property from wasteful rent-seeking or rent-dissipation activities. For example, the primary function of brands and other source

²⁷ 35 U.S.C.A. § 1 et seq.

²⁸ 17 U.S.C.A. §§101-805; 1001-1010; 11-1; 1201-1205; 1301-1332.

²⁹ See generally, William M. Landes & Richard A. Posner, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* (2003).

³⁰ See J.G. Head, *Public Goods and Public Policy*, 17 PUB. FIN. 197 (1962) (distinguishing the non-rivalrousness and non-excludability aspects of public goods).

³¹ See Landes & Posner, *supra* note 29 at 21.

³² *Id* at 48-60.

³³ 17 U.S.C.A. §107.

³⁴ 35 U.S.C.A. §271(e)(1). See generally, Maureen A. O'Rourke, "Toward a Doctrine of Fair Use in Patent Law," 100 COLUM. L. Rev. 117 (2000).

³⁵ See *infra* text accompanying note 44.

³⁶ 17 U.S.C.A. §906(a)(1).

³⁷ 17 U.S.C.A. § 1201(f)(1). See generally, Pamela Samuelson & Suzanne Schtchmer, *The Law and Economics of Reverse Engineering*, 111 YALE L. J. 1575 (2002).

identifiers protected by the trademark laws³⁸ is not to provide incentives for the creation of new trademarks, but rather to enable firms to protect their investments in product quality or other forms of goodwill from their competitors. Trademarks do not expire because firms otherwise would not make significant investments in brands.³⁹ Similarly, right of publicity statutes allow celebrities to prevent low-valued uses of their identity or persona that would reduce the present value of their human capital. Under some state laws protecting publicity rights, these rights last beyond death, are inherited by the celebrity's descendants, and are fully transferable.⁴⁰ Others have noted a similar function in patent law,⁴¹ and have suggested this function as a reason for the expansion of the term of copyright law.⁴²

The scenarios discussed in this paper involve factual information that is not within the limited protection discussed above. Therefore, the value of this information to its producers is dissipated on disclosure. Thus, we must examine how firms and individuals can appropriate the returns from informational investments that are not protected by statutes such as the copyright, patent, and trademark laws. Property right protection for disclosed facts is limited to state misappropriation law, which provides narrow quasi-property right protection against competitors for a narrow category of informational investments, and is unlikely to apply to the situations discussed in this paper.⁴³ State trade secret law more widely protects valuable business information that has not been publicly disclosed.⁴⁴ Trade secret law is complemented by employment and other contracts can

³⁸ 15 U.S.C.A. §§ 1051 et seq.

³⁹ In general, there is, ex-ante, an infinite number of arbitrary marks, so the “monopoly” costs associated with strong protection of such trademarks are small. On the other had, trademarks can be lost if the mark becomes generic. See Landes & Posner, *supra* note 29 at __. When a mark becomes generic, it no longer identifies the source, and thus ceases to serve its role in bonding a firm's investments in quality. Moreover, the costs of allowing a firm to exercise property rights in a generic mark will result in higher “monopoly” costs.

⁴⁰ Cal. Civ. Code §990. Mark F. Grady, *A Positive Theory of the Right of Publicity*, 1 UCLA ENT. L. REV. 97 (1994).

⁴¹ Edmund Kitch, *The Nature and Function of the Patent System*, 20 J. L. & ECON. 265 (1977); Mark F. Grady and Jay Alexander, *Patent Law and Rent Dissipation*, 78 VA. L. REV. 305 (1992).

⁴² Landes & Posner, *supra* note 29 at 222-28; Stan J. Liebowitz & Stephen E. Margolis, *Seventeen Famous Economists Weigh in on Copyright: The Role of Theory, Empirics, and Network Effects* (December 2003), available at <http://ssrn.com/abstract=488085>, forthcoming BERK. L. TECH. J.

⁴³ Richard A. Posner, *Missappropriation: A Dirge*, 40 HOUS. L. REV. 621 (2003).

⁴⁴ See RESTATEMENT OF TORTS (THIRD) §§757, 758 (protecting as a trade secret undisclosed information used in one's business giving the owner “an opportunity to obtain an advantage over competitors who do not know or use it.”). The Uniform Trade Secrets Act defines a trade secret as “information, including a formula, pattern, compilation, program, device, method, technique or process that . . . (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.”

protect secrecy.⁴⁵ However, trade secret law protects information only against disclosures that are the result of an independent wrong such as a breach of contract or a tort such as trespass,⁴⁶ rather than of accidental disclosure or reverse engineering.

The limitations on protection of property rights in information dictated by the use-creation tradeoff are generally consistent with the Court's misappropriation approach to property rights to trading information. In contrast, a firm's ability to protect undisclosed factual information under the Ayres & Choi proposal goes far beyond the limits set forth under these current schemes by allowing firms to prevent trading based on information that was neither misappropriated or otherwise obtained through improper means.

A consequence of the balance struck by Ayres & Choi is that those outside the firm are constrained in appropriating the returns to their investments in information. This is significant because, given the limited ability to protect these investments using the federal and state statutory intellectual property schemes, the stock market becomes the main remaining way for outsiders to appropriate the returns to their investments in information. Jack Hirshleifer suggested in his seminal article that use of speculative mechanisms could substitute for traditional intellectual property rights.⁴⁷ For example, an inventor faced with an ineffective patent system could obtain compensation for investments in research by trading before disclosing the invention to the market, either by buying firms that would benefit from the inventions or selling those whose products would be made obsolete. Similarly, outsider investments in factual information about a firm could be similarly appropriated through trading profits.

Because information is crucial to stock market efficiency, the law should encourage its discovery by permitting market actors to capitalize on information. The argument is particularly strong in light of evidence of the extent to which behavioral biases can drive uninformed traders.⁴⁸ In other words, in the absence of information, the market may not just take a random walk, but may move in the wrong direction. Moreover, informed trading can be particularly useful to correct misinformation. Accounting frauds have continued since Equity Funding, increasing the importance of informed arbitrageurs like Ray Dirks.

The increasing availability of information markets for specific firms or groups of firms raises a question as to the need to use securities markets for this purpose. The experience with "fantasy" markets like the Hollywood Stock Exchange, which allow investors to bet on the likelihood of specific events like film openings, indicates that such

⁴⁵ See generally, Bruce H. Kobayashi & Larry E. Ribstein, *Privacy and Firms*, 79 DENV. U. L. REV. 527 (2002); Paul H. Rubin & Peter Shedd, *Human Capital and Covenants Not to Compete*, 10 J. LEG. STUD. 93 (1981).

⁴⁶ Landes & Posner, *supra* note 29 at 354-5.

⁴⁷ See Jack Hirshleifer, *The Private and Social Value of Information and Reward to Inventive Activity*, 61 AM. ECON. REV. 561 at 570-72 (1971) (discussing speculative mechanisms and their implications for patent policy).

⁴⁸ See generally, *Fraud on a Noisy Market*, September 12, 2005, U Illinois Law & Economics Research Paper No. LE05-022, available at <http://ssrn.com/abstract=803064>.

markets can be efficient with a small number of informed traders.⁴⁹ Firms theoretically can establish markets to trade in, for example, successful performance of a large contract, or other major event.⁵⁰ Firms could design the trading rules on such markets to minimize costs such as those discussed above. For example, they could prohibit short sales and set purchase limits to reduce the profit opportunities from sabotage or other misconduct. On the other hand, short sale restrictions might reduce information by constraining speculation on negative information. Because firms would internalize most or all of these effects, they would have an incentive in designing trading rules to balance the costs of potential harmful activity, the marginal effect of trading rules in deterring such activity, and the foregone information benefits of trading restrictions.

Outsider trading can, however, continue to serve an important role despite the development of these markets. There may be many idiosyncratic business decisions for which setting up a futures market would be infeasible. These would include events that are hard to anticipate, open ended, or otherwise not observable.⁵¹ It follows that the conventional capital markets can usefully fill gaps left by these specialized markets.

B. ENCOURAGING MONITORING AND EXTERNAL DISCIPLINE

Trading not only capitalizes on investments in information, but also can encourage other activities that produce information as a byproduct. These activities may be socially valuable by, for example, providing monitoring and discipline of public firms. This monitoring and discipline is particularly important given defects in more conventional monitors like accountants, lawyers, executives and directors noted in the wake of Enron.⁵² The problem with hired monitors is that they may have countervailing interests and only weak incentives to spot fraud. This limits the potential benefits from

⁴⁹ See Saul Levmore, *Simply Efficient Markets and the Role of Regulation: Lessons from the Iowa Electronic Markets and the Hollywood Stock Exchange*, 28 J. CORP. L. 589 (2003).

⁵⁰ For an example, see Bo Cowgill, *Putting Crowd Wisdom to Work* (September 21, 2005), <http://googleblog.blogspot.com/2005/09/putting-crowd-wisdom-to-work.html>.

⁵¹ Stock vs. information markets differ in several important ways. As Levmore notes, information markets depend upon informed traders to drive the market towards information efficiency. See Levmore, *supra* note 49. Thus informed trading, but insiders, tippees, or informed outsiders, are welcomed in such markets. Einbinder notes that both information and stock markets can be efficient. However, because information markets are based on fixed observable events over a finite time period, while stock markets measure variable, non-observable events over an infinite horizon, the concept of accuracy only applies to the former. Because the former is based on fixed observable events, information markets in theory may not be useful in cases where the information causes the firm to change the underlying strategy the market is based upon. See Matt Einbinder, *Information Markets: Using Market Predictions to Make Today's Decisions* (May 27, 2005), available at http://papers.ssrn.com/paper.taf?abstract_id=730508. But see Robin Hanson & Ryan Oprea, *Manipulators Increase Information Market Accuracy* (July 2004), available at <http://hanson.gmu.edu/biashelp.pdf> (noting that concern over the effect of market manipulators on price accuracy in such markets may be misplaced); Robin Hansen, Ryan Oprea, & David Porter, *Information Aggregation, and Manipulation in an Experimental Market*, J. ECON. BEH. & ORG. (forthcoming 2006) working paper version available at <http://hanson.gmu.edu/biastest.pdf> (presenting experimental evidence showing that market manipulators are unable to distort price accuracy).

⁵² See generally, Larry E. Ribstein, *Market vs. Regulatory Responses to Corporate Fraud*, 28 J. CORP. L. 1 (2002).

requiring monitoring and regulating monitors.⁵³

Outsiders' ability to trade on non-public information gives the full range of people with information about firms to capitalize on this information. This includes not only conventional monitors, but also lower level employees who might have knowledge of fraud, competitors seizing market opportunities that market incumbents have failed to exploit, parties entering into arms' length contracts, class action lawyers and hedge funds. Stock trading provides potentially strong incentives because it enables traders to reap the value of an event when the efficient market capitalizes the event in market prices. Because rewards from outsider trading may exceed existing rewards for disclosure or sanctions for silence, it may encourage outsiders to come forward with information they would otherwise hide.

To be sure, outsider trading is not a complete substitute for other monitoring devices. However, it may be a sufficient complement to such devices that, together with the availability of other contractual and market mechanisms and existing regulation, it makes unnecessary additional, potentially costly, regulation. Moreover, outsider trading's role in encouraging monitoring is significant because it suggests the potential inefficiency of empowering firms or their managers – the parties that would otherwise be monitored – to enlist legal sanctions in prohibiting outsider trading

II. SPECIFIC OUTSIDER TRADING INCENTIVE DEVICES

This Part analyzes the specific examples of outsider trading as incentive devices. In general, the elements of the theory include (1) trading by an outsider on information developed or learned by the trader or someone who has authorized the trading; (2) information that is material and nonpublic; (3) potential trading profits that provide an incentive for a socially productive action that the trader might not take if trading were not allowed.

A. CONTROL TRANSACTIONS

Situation A is similar to the facts in battle for control of King Pharmaceuticals by Mylan Laboratories. Hedge fund operator Richard Perry owned stakes in both Mylan and King. If Mylan succeeded in buying its competitor, Perry's King shares were likely to go up. Although Perry's Mylan shares were likely to go down, he stood to gain on net by voting his Mylan shares for the transaction because he had arranged to transfer his shares at his purchase price. Perry had, in effect, bought the voting power of the Mylan shares while divesting himself of the equity ownership.

A preliminary issue is whether there is any reason to prevent the buying and selling of votes unattached to residual claims. Manne notes that the trading of votes would benefit shareholders in the same way that voluntary exchange benefits economic agents generally.⁵⁴ While imperfections in the market for votes may make the costs of direct vote selling outweigh these benefits in the political setting,⁵⁵ these imperfections

⁵³ *Id.*

⁵⁴ See Henry G. Manne, *Some Theoretical Aspects of Share Voting: An Essay in Honor of Adolf A. Berle*, 64 COLUM. L. REV. 1427, 1428 (1964).

⁵⁵ See James Buchanan & Gordon Tullock, *The Calculus of Consent*, at 125-30 (1962).

are less problematic in the corporate setting because shareholders have relatively homogenous interests. Also, the effects of any conflicts are minimized by the right of dissenting shareholders to exit by selling shares. To the extent that selling votes separate from shares is efficient, taxing the sale by forcing bundling of votes and residual claims may deter some socially productive transactions.⁵⁶

Vote buying and selling can, however, be inefficient in some situations because it enables the buyer and the seller to realize gains while losses are incurred by other shareholders.⁵⁷ For example, suppose the vote buyer stands to make a \$50 private gain on a transaction with Firm, while Firm may lose \$80. Firm has ten shareholders, each owning \$10 in stock. If the votes are bundled with the equity shares, the shareholders, absent collective action problems, will not approve the transaction, as doing so will reduce the value of their shares to \$2. However, if the voting rights are sold separately, the vote buyer will favor approval of the transaction even if it reduces the equity value of the firm by more than the gain to the vote buyer.

Even if vote-selling may harm other shares in the firm, it does not follow that it should be legally prohibited. If vote-selling facilitated wealth transfers from other shareholders, these other equity claims would sell at a discount. This would provide an incentive for someone to reunify the equity claims with their voting rights, or to prevent them from being separated in the first place.⁵⁸

Easterbrook & Fischel note that this analysis suggests that a default rule tying votes and equity claims can be efficient because it is the rule investors usually would prefer.⁵⁹ However, this ignores the potential benefits of vote-selling, particularly in facilitating the operation of an active market for corporate control.⁶⁰ The benefit of such an enhanced market for control in decreasing agency costs may outweigh the costs from potential wealth transfers among shareholders. It follows that allowing vote selling around control events may be efficient.⁶¹ The question, then, is whether a default rule against vote-selling would lead to prohibition only in the situations in which the costs of vote-selling outweigh the benefits. The problem with a default prohibition in public corporations is that managers, whose power would be threatened by a more active control market, have significant power under current public corporation governance rules.⁶²

⁵⁶ See Manne, *supra* note 54 at 1436.

⁵⁷ See Frank H. Easterbrook & Daniel R. Fischel, *Voting in Corporate Law*, 26 J. L. & ECON. 395 (1983).

⁵⁸ *Id.* at 411. See also, Yoram Barzel & T. R. Sass, *The Allocation of Resources By Voting*, 105 Q. J. ECON. 745 (1990) (examining the determinants of voting rights in private organizations and finding variation in voting rules in such organizations that is consistent with efficiency).

⁵⁹ Easterbrook and Fischel, *supra* note 57 at _.

⁶⁰ Manne, *supra* note 54 at 1432, 1236.

⁶¹ *Id.*

⁶² See generally, Larry E. Ribstein, *Accountability and Responsibility in Corporate Governance*, NOTRE DAME L. REV., (forthcoming 2006), working paper version available at <http://ssrn.com/abstract=746844>.

Thus, managers could block a lifting of the prohibition even in situations in which enabling vote-selling would be efficient. Indeed, given the potential role of vote-selling as a monitoring device, it is questionable whether firms should be able to enlist government help in enforcing a prohibition.⁶³

The Mylan/King transaction illustrates how vote-selling may enable the market for control. It is critical to the transaction that it involved the purchase of minority votes – less than 10%. The fact that this relatively small percentage could swing the vote suggests that there was a close case as to Mylan’s net benefit from the transaction. Carl Icahn opposed the transaction because he suspected overpayment, perhaps because Mylan’s managers would gain personally if Mylan were bigger.⁶⁴ But since the verdict on this benefit was evidently close, the transaction likely either produced some gains for both parties, or at worst only a small loss for Mylan.

The big problem in Mylan was the allocation of any surplus from the transaction. One might object that King shareholders would be getting an “unfair” allocation of the surplus in the sense that it was less than the owners of both firms would favor without the intervention of Mylan’s self-interested managers. Conversely, it might be said that, if Mylan’s managers were more faithful, they might have negotiated down the price to the point that the transaction would not be worthwhile for the King shareholders. But it is incorrect to view efficiency from the standpoint of either the Mylan or the King shareholders. Given the prevalence of highly diversified portfolios, the vast majority of the firms’ owners might prefer a rule that facilitates mergers that produce joint gains for the parties, as this one evidently did, to one that hangs them up on division of the pie. As Easterbrook & Fischel note, “an investor holding a diversified portfolio with stock in both corporations is concerned with the total gain from the transaction, not with how the gain is allocated.”⁶⁵

Hansen & Lott show that diversified shareholders would prefer a corporate policy of portfolio value maximization rather than a policy that focused on maximizing the value of an individual firm.⁶⁶ They also show that, where shareholders hold both the target and acquiring firm, overpayment by the acquirer can be rational and consistent with maximizing the wealth of these shareholders. Hansen & Lott present evidence consistent with diversified shareholders minimizing interfirm externalities.⁶⁷ For example, Hansen & Lott find significant cross-holdings of firms in the same industry by firms and institutional investors. Moreover, they show that the abnormal returns to acquirers of private firms are greater than those attempting to acquire public firms.⁶⁸

⁶³ See *infra* Part IV.

⁶⁴ See Richard Roll, *The Hubris Hypothesis of Corporate Takeovers*, 59 J. BUS. 197 (1986).

⁶⁵ Frank H. Easterbrook & Daniel R. Fischel, *Corporate Control Transactions*, 91 YALE L. J. 698 (1982).

⁶⁶ See Robert G. Hansen & John R. Lott, Jr., *Externalities and Corporate Objectives in a World with Diversified Shareholders/Consumers*, 31 J. FIN. & QUANT. ANAL. 43 (1996).

⁶⁷ See *id.* See also Roger H. Gordon, *Do Publicly Traded Corporations Act in the Public Interest?* 3 ADV. IN ECON. ANAL. & POLICY, Article 2, (2003).

⁶⁸ Hansen & Lott, *supra* note 66.

This follows from the fact that the former are unable to own a stake in the target, and therefore do not receive positive returns from the acquiring firm. As a result, purchasers of private targets are less willing than those of public targets, *ceteris paribus*, to bid up the price paid for the target.

Hansen & Lott also demonstrate that non-diversified shareholders attempting to maximize individual firm value have an incentive to oppose value-creating mergers, and support economic decisions that would decrease wealth. Because diversified shareholders will rationally choose not to maximize the value of an individual firm when doing so would reduce the value of the diversified portfolio, an undiversified investor has an incentive to buy a controlling interest in the firm and alter its policies so that it maximizes the firm's individual stock price. This can reduce wealth by undoing the diversified shareholders' efforts to internalize externalities. For example, T. Boone Pickens attempted to force Koito, a Japanese automotive parts manufacturer, to raise its prices to the automaker Toyota.⁶⁹ Koito was a member of the Toyota *Keiretsu*, a group of vertically related companies whose members own significant cross holdings of the stock of other members of the group.⁷⁰ The Toyota keiretsu included Toyota, Koito, and other parts suppliers. Pickens, as an undiversified Koito investor, wanted prices increased in order to maximize Koito's profits. However, if Koito and other upstream members of the keiretsu raised prices, this would impose deadweight losses on the group in the sense that the joint profits of the members of the Keiretsu would fall more than the increase in profits to Koito.⁷¹ Thus, the members of the Keiretsu rationally resisted Pickens' attempts to increase Koito's profits.

Although the Mylan/King situation might seem to involve a special case, it actually illustrates the broader principle about incentives and information that is the main theme of this article. Perry can be viewed as overcoming barriers to the transaction that were produced by the fact that it was not being negotiated directly by diversified shareholders. Perry likely had information indicating the existence of an overall surplus from the deal, and specifically a gain to King, which is why he bought King stock after the deal was announced. But Perry also realized that the deal might not go through. This possibility produced a discount in King shares below the price if the deal went through, which in turn made it worthwhile for Perry to speculate on the shares. But Perry may not have been willing to make the gamble without the opportunity to, in effect, load the dice

⁶⁹ *Id.* at 57.

⁷⁰ Toyota owned 19 percent of Koito's stock, and members of the keiretsu held 60-60 percent of the total. Toyota also had seats of the Koito's board, and several of the Koito executives were from Toyota. See Hansen & Lott, *supra* note 66 at _.

⁷¹ See generally, Augustin Cournot, *Research into the Mathematical Principles of the Theory of Wealth* (1838) English Edn, N. Bacon (ed.), MacMillan (1987). For a recent review and analysis of this issue and the related literature see Giuseppe Dari-Mattiacci & Francesco Parisi, *Substituting Complements*, GEORGE MASON UNIVERSITY LAW & ECONOMICS WORKING PAPER No.05-25 (2005); Daniel P. O'Brien & Greg Shaffer, *Bargaining, Bundling, and Clout: The Portfolio Effects of Horizontal Mergers*, 36 RAND J. ECON. 573 (2005). Robert E. McCormick, William F. Shuqhart & Robert D. Tollison, *A Theory of Commodity Bundling in Final Product Markets: Professor Hirshleifer Meets Professor Becker*, INT. REV. L. ECON (2005), in press). An alternative solution to the problem of internalizing between firm externalities in this setting would be full vertical integration. Use of vertical integration would eliminate the problem of the undiversified investor but may be unattractive for other reasons. See, e.g., Benjamin Klein, Crawford & Armen Alchian, *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J. L. & ECON. 297 (1978).

by buying the Mylan vote.

This explanation is especially likely given the presence of a large undiversified stockholder, Icahn, who like Pickens in the Koito example, would have an incentive to oppose a wealth maximizing transaction if the distribution of gains did not favor Mylan. The vote “seller” – i.e., the party who agreed to buy Perry’s stock without the right to vote it on the transaction – may have been willing to speculate on a positive outcome of the Mylan/King combination by supporting the person in the best position to make it happen. Even if the vote “seller” realized a gain from the vote, the potential gain was limited by the fact that Perry, with his stake in King, was the only potential buyer.

To illustrate this, consider the following situation of two firms, K and M, in the same industry, where firm K is currently mismanaged. In the absence of a takeover, stock prices of the two firms equal S_{K0} and S_{M0} . A takeover of firm K by firm M, a well managed firm, would increase the value of the merged firm so that $S_{KM} > S_{K0} + S_{M0}$. If the distribution of gains favors the target, successful completion of the merger may decrease the acquirer’s price, i.e., $S_{M0} > S_{M1}$, and increase the target’s price, i.e., $S_{K0} < S_{K1}$. Assume that the transaction is value increasing, so $S_{M0} + S_{K0} < S_{M1} + S_{K1}$.

Suppose that 60 percent of both companies are owned by diversified shareholders who have value-weighted proportions of both K and M in their portfolios, that such shareholders vote with probability .65, and that such votes are consistent with the shareholders’ interests. Assume that the non-diversified shareholders in each company vote with probability one. Under these assumptions, both the diversified and undiversified shareholders at K vote for the transaction. In contrast, M’s diversified shareholders vote for the transaction, but its non-diversified shareholders vote against. Thus, at firm M, without intervention, 79 percent of the shares will be voted, and the merger will be rejected by a 50.6 to 49.4 percent margin. That is, although the transaction is favored by a majority of shareholders in both firms, the transaction will fail.

Anticipating this uncertain outcome, shares in firm K sell at a discount relative to S_{K1} and shares of firm M sell at a premium relative to S_{M1} . By purchasing shares and their attached voting rights from undiversified shareholders, a hedge fund operator can increase the probability these shares would be voted. A hedge fund’s purchase of a 10 percent stake from diversified shareholders would increase the probability that these shares are voted – that is, it increases the expected number of yes votes to 42.5 percent,⁷² resulting in the merger being approved 51.5 to 48.5 percent. By hedging the purchase, the hedge fund can increase the probability that the transaction is approved by firm M’s shareholders without having to become an undiversified shareholder in M. Moreover, the hedge fund votes the shares consistent with the interest of the diversified shareholder who sold the voting rights.

Viewed from this perspective, the Perry gambit was not pernicious, but rather a way to maximize the joint capital of the participating firms without interference by self-interested managers or non-diversified shareholders. The gambit is necessary because federal takeover regulation and strong takeover defenses at the state level have reduced the leverage of outside investors like Perry in control transactions. New techniques are necessary to make speculating in control pay off, just as Milken had to perfect the use of

⁷² After the purchase of votes, 50 percent of the shares will be voted by undiversified shareholders at a 65% rate, and 10 percent held by the hedge fund will be voted with probability 1, resulting in 42.5% of the shares formerly held by diversified shareholders being voted. As before, we assume that the 40% of undiversified shares will be voted against with probability one.

junk bonds for a similar purpose twenty years ago. In other words, Perry can be viewed as the new Milken (or Icahn, for that matter). Vote selling and buying can be viewed as a way for the vote seller to share in the benefits from Perry's information gathering, and for the control rights associated with the votes to flow to the person with the most reliable information, and therefore the ability to use them most profitably.⁷³

Even if these transactions do involve costly manipulation, the problem can be addressed through contracts rather than regulation. Firms can restrict voting by holders of "encumbered" shares like Perry.⁷⁴ States can reduce the costs of these contracts by putting the rules in their corporation statutes. Whether or not the rules are formally mandatory at the state level, they would be functionally optional because of firms' ability to choose where to incorporate.⁷⁵ Although outsider trading seemingly involves market regulation, the analysis above shows how closely it ties to internal governance, particularly in the takeover setting.

We are unlikely, however, to see such states adopt broad prohibitions on vote-selling, despite the outcry over the Perry deal. It is worth noting that the ability to separate vote and ownership in much the same way as in the Perry deal is the explicit default rule in partnerships. To be sure, partnership law compensates to some extent by providing by default for a unanimity voting rule on significant transactions.⁷⁶ But this can cut the other way by giving blocking power to naked votes. Vote-buying is even more likely to be efficient in publicly held corporations than in closely held partnerships because of the existence of a market for control in the former situation.

The analysis in this part casts doubt on the efficiency of the broad substantive regulation of "vote buying" proposed by Martin & Partnoy, who call for limiting voting rights on encumbered shares because their economic incentives deviate from those of "other pure residual shareholders."⁷⁷ As discussed above in this Part, vote-buyers may have interests consistent with those of the other shareholders. Moreover, Martin & Partnoy fail to recognize that such a definition of encumbered shares would certainly cover many diversified investors, including institutional investors that are often the centerpiece of corporate voting reform.⁷⁸ As noted above, such diversified investors might favor mergers that would reduce the value of one of the firms but increase the value of the portfolio. In light of these concerns, the "inefficiency" of deviations from the incentives of a "pure residual shareholder" is not "obvious."⁷⁹

⁷³ Manne, *supra* note 54, at 1444, makes this point in his defense of allowing a market in votes separate from the residual claims.

⁷⁴ See Hu & Black, *supra* note 8 at _.

⁷⁵ See Larry E. Ribstein, *The Important Role of Non-Organization Law*, 40 Wake Forest L. Rev. 751 (2005).

⁷⁶ See UPA 18(h); RUPA 401(g).

⁷⁷ Martin & Partnoy, *supra* note 6 at 810.

⁷⁸ See Easterbrook and Fischel, *supra* note 57 at _; Hu & Black, *supra* note 8.

⁷⁹ *Id.*

Thus, Hu & Black sensibly reject the imposition of more substantive regulation on vote selling given the lack of information about the practice and the potential for both type I and type II errors. They suggest that any such regulation would properly begin as rules that allowed firms to decide *ex ante* whether or not to allow vote trading.⁸⁰ They also suggest updating disclosure requirements to cover the derivative transactions that are at the center of the vote buying transactions. This would generate public information about these little understood vote selling practices. This disclosure might show that scenarios like that hypothesized above are rare, and that inefficient vote-selling is more common. This might point to regulation of specific transactions. However, disclosure is not costless. In particular, mandatory disclosure may erode rights in information, and therefore the incentive effects of allowing outsider trading.

Finally, it is worth noting that the Perry deal has become a rallying cry for regulating hedge funds and cited as an important justification for the SEC's recent hedge fund disclosure rule,⁸¹ and for more expansive disclosure generally.⁸² Hedge funds are a tempting regulatory target because they have recently played a significant role in corporate control transactions.⁸³ This suggests that the real regulatory issue is not the specific evil of vote buying, but the takeover market generally and its potential disciplinary effect on managers.

B. MARKET ENTRY AND ANTITRUST

Market entry or failure to enter, as well as control transactions such as mergers and acquisitions, can create significant inter-firm externalities that, in turn, generate opportunities for outsider trading profits. Indeed, some have used stock price movements around the announcement to test whether or not mergers and subsequent antitrust challenges to mergers were anticompetitive or pro-competitive.⁸⁴ Moreover, the outsider trading itself may implicate the antitrust laws. For example, significant cross-holdings by competitors in an oligopolistic market can reduce the competitors' incentives to compete,

⁸⁰ *Id.*

⁸¹ See Skeel, *supra* note 7; SECURITIES AND EXCHANGE COMMISSION, Registration Under the Advisers Act of Certain Hedge Fund Advisers 17 CFR Parts 275 and 279, Release No. IA-2333; File No. S7-30-04, RIN 3235-AJ25, available at <http://www.sec.gov/rules/final/ia-2333.pdf>.

⁸² See Hu & Black, *supra* note 8.

⁸³ See, e.g., *The New Raiders*, Business Week Online, Feb. 28, 2005 available at http://www.businessweek.com/magazine/content/05_09/b3922041_mz011.htm, (describing hedge fund operators such as Richard Perry as the next generation of corporate raiders); Riva D. Atlas, *For Sears Shareholders, Silence Stirs Anxiety*, (Dec. 7, 2005) (discussing hedge fund's role in recent takeovers, including Edward Lampert's firm ESL Investment's takeover of K-Mart and the subsequent takeover of Sears, with Perry Capital).

⁸⁴ See, e.g., Espen Eckbo, *Horizontal Mergers, Collusion, and Stockholder Wealth*, 11 J. Fin. Econ. 241 (1983); Robert Stillman, *Examining Antitrust Policy Towards Horizontal Mergers*, 11 J. Fin. Econ. 225 (1983); Espen Eckbo & Peggy Weir, *Antimerger Policy Under The Hart-Scott-Rodino Act: A Reexamination of the Market Power Hypothesis*, 28 J. L. & Econ. 119 (1985); 149.FTC v. Staples, Inc., 970 F. Supp. 1066 (D.D.C. 1997); Fredrick R. Warren-Boulton, & S. Dalkir., *Staples and Office Depot: An Event-Probability Case Study*, 19 REV IND. ORG. _ (2001).

resulting in higher prices and lower output in equilibrium.⁸⁵

The theoretical possibility that such cross-holdings may be anticompetitive does not imply that the holdings should be regulated, since cross-holdings by firms in the same industry are common⁸⁶ and can have beneficial effects that increase overall welfare. Moreover, even if cross-holdings can be anti-competitive, this does not necessarily apply to short positions. Indeed Hansen & Lott show how Situation B, involving short positions by new entrants in the shares of incumbent firms, can produce socially productive outcomes by encouraging entry in situations in which it might otherwise be discouraged.⁸⁷ This may reduce the need for antitrust remedies that bar anticompetitive restrictions on entry. They explain why the antitrust laws and securities laws might distinguish long positions, which are regulated, from short positions, which are not.⁸⁸

As Hansen & Lott discuss, the trading strategy depends on what the market expects to happen prior to entry. To see this, consider the following two period model where an incumbent monopolist (firm *i*), currently making per-period monopoly profits of π_{im} , faces potential entry in period 2. In general, the incumbent's stock price equals $\pi_{im} + [(1-\alpha)\pi_{im} + \alpha E(\pi_{id})]/(1+r)$, where α is the probability that the entrant will enter in the second period and $E(\pi_{id})$ is the incumbent's expected second period profits if entry occurs, which are assumed to be less than the monopoly profits π_{im} . If the market expects no entry in period 2, then $\alpha = 0$ and the present value of the monopolist's profit stream is $\pi_{im} + \pi_{im}/(1+r)$. Unexpected entry reduces the incumbent traded firm's share price by $(\pi_{im} - E(\pi_{id}))/ (1+r)$ and a short-sale will be a profitable trading strategy for the new entrant. If the market anticipates that entry is certain, however, $\alpha = 1$ and the traded firm's shares may not react, or may even rise on entry when the entrant is weaker than the market expected, so that actual second period with entry profits for the incumbent π_{id} are greater than the expected profits $E(\pi_{id})$. In this case, the potential entrant may take a long position in the incumbent, and choose to delay entry or forgo entry entirely. In any event, the market reaction depends on the entrant's strength and on whether the market expects the potential entrant to follow through on an announced plan to enter. As with the contract scenario discussed in subpart F, these circumstances go to the value of the opportunity, not whether it should be legally available.

To see how the potential entrant's trading profits act as a counterstrategy to predatory or exclusionary strategies, consider the following example. If the monopolist does not oppose entry with predatory pricing, profits for the incumbent and entrant equal π_{id} , π_{ed} respectively. Suppose that $\pi_{ed} > F$, where F is the entrant's cost of entry. Under these assumptions, the market should expect entry in the second period.

Now suppose that the incumbent credibly commits to engage in predatory pricing

⁸⁵ See R. J. Reynolds & Bruce R. Snapp, *The Competitive Effects of Partial Equity Interests and Joint Ventures*, 4 INT'L. J. INDUS. ORG. 141 (1986), Joseph Kattan, *Antitrust Analysis of Technology Joint Ventures: Allocative Efficiency and the Rewards of Innovation*, 61 ANTITRUST L. J. 937 (1993).

⁸⁶ See *supra* text accompanying note 68 and 70.

⁸⁷ See Hansen & Lott, *supra* note 21.

⁸⁸ *Id.* at 268.

if entry occurs.⁸⁹ That is, upon entry, the incumbent sets prices in the second period so that the expected profits of the entrant are less than entry costs F , i.e., $\pi_{ep} < F < \pi_{ed}$. A predatory strategy results in a profit sacrifice for the incumbent, or may even produce a loss, such that $\pi_{ip} < 0 < \pi_{id}$. If the market perceives that the incumbent's commitment to predation is credible, it will not expect entry and the incumbent's stock price will reflect monopoly profits in the second period.

Under these conditions, suppose that the potential entrant takes a short position in the incumbent. Trading profits equal $(k/N)(\pi_{im} - \pi_{ip})$, where k is the number of the shorted incumbent's shares and N is number of outstanding shares in the incumbent. The entrant's total profits, including trading profits, equals $[\pi_{ep} - F] + [(k/N)(\pi_{im} - \pi_{ip})]$. Assuming that the net operating profit of the entrant is negative, this can be offset by trading profits if either the predatory profit sacrifice or the forgone monopoly profits are large (i.e., $\pi_{ip} \ll 0$ or $\pi_{im} \gg 0$).

It is possible, however, that short positions by *incumbents* in potential *rivals* might increase the need for antitrust remedies by permitting dominant firms to commit to and recoup sacrificed profits from predatory or exclusionary strategies.⁹⁰ As in the case of the entry-facilitating short position, the profitability of such a strategy will depend whether the market price expects the incumbent firms to engage in an exclusionary strategy. If the market does not have this expectation, a short position can increase the profitability of a predatory or exclusionary strategy by giving the incumbent the trading profits from the decline in the entrant's market value. Trading profits can make such strategies profitable and allow the incumbent to credibly commit to carrying out such a strategy.⁹¹

Outsider trading's potential to increase the probability of antitrust violations, however, is not a reason to generally prohibit it in this situation. Indeed, regulating outsider trading presents the same problems that are inherent in antitrust law of regulating behavior that has the potential to be both pro- and anti-competitive. Conduct that has been identified as facilitating exclusionary behavior, including tying, bundling, and exclusive dealing, can also have pro-competitive effects.⁹² Moreover, the exclusion of a

⁸⁹ For example, the incumbent may execute long term sales contracts that set price below cost if there is entry. This example assumes the incumbent can credibly commit to a predatory strategy. For a discussion of this issue, see John R. Lott, Jr., ARE PREDATORY COMMITMENTS CREDIBLE? WHO SHOULD THE COURTS BELIEVE? (1999).

⁹⁰ *Id.* at 265, note 8. See Herbert J. Hovenkamp, *Discounts and Exclusions* (August 2005), U Iowa Legal Studies Research Paper No. 05-18, available at <http://ssrn.com/abstract=785966>; Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837 (1990).

⁹¹ See Bruce H. Kobayashi, *Does Economics Provide a Reliable Guide to Regulating Commodity Bundling by Firms? A Survey of the Economic Literature*, 1 J. COMP. L. & ECON. 707, 733-4 (2005) (discussing role of commitment in models of entry deterrence and exclusion); Lott, *supra* note 89 (predation by private enterprises is implausible, but predation by public enterprises is not).

⁹² *Id.* See also, e.g., Howard Marvel, *Exclusive Dealing*, 25 J. L. & ECON. 1 (1982); Benjamin Klein, *Exclusive Dealing as Competition for Distribution "on the Merits"*, 12 GEO. MASON L. REV. 119 (2004); J. Heide, S. Dutta, & M. Bergen, *Exclusive Dealing and Business Efficiency: Evidence from Industry Practice*, 41 J. L. & ECON. 387 (1998); Benjamin Klein & Lester Saft, *The Law and Economics of Franchise Tying Contracts*, 28 J. L. & ECON. 345 (1985).

rival, either through predatory pricing,⁹³ or through the use of conduct that erects entry barriers can serve to increase welfare.⁹⁴

In any event, regulation of outsider trading because of the potential for anticompetitive effects would more properly proceed through the antitrust than through the securities laws. Moreover, the application of current antitrust laws may effectively distinguish between the pro- and anticompetitive uses of short sales discussed above. For example, the use of short sales to facilitate entry is unlikely to raise antitrust concerns because the trading firm will almost certainly be found to lack antitrust market power and prevent a finding of liability under the antitrust laws.⁹⁵ The same would not be true in the case of short sales by an incumbent engaged in predatory pricing, and the use of such short sales could be probative in proving that the trading firm had a dangerous probability of recouping its investment in below cost prices.⁹⁶

C. LAWSUITS

Situation C concerns short-selling by lawyers or plaintiffs in advance of a lawsuit that the trader expects will negatively affect the price of the shares. This trading does not fit into the misappropriation paradigm or any other justification for imposing liability. But Moin Yahya considers three arguments against permitting this trading: market integrity, fraud by silence, and the potential for double recovery.⁹⁷ As discussed below in subpart III.D., the market integrity argument is weak on policy grounds, and may not even apply in the absence of misappropriation. There is clearly no liability for fraud by silence. The following analysis accordingly focuses on the third argument.

The “double recovery” argument goes to the heart of whether allowing trading in this situation provides appropriate incentives for litigation. A class action plaintiff must share the recovery with other plaintiffs, and the lawyer gets a fee representing only a fraction of the total recovery. It follows that, in the absence of trading, the plaintiff’s or lawyer’s incentives may be too weak rather than too strong to encourage the socially optimal amount of litigation. The “double recovery” argument baselessly assumes that the incentives for suit without such trading are optimal. In fact, the class action lawyer may or may not have adequate incentives depending on the rule regarding fees, as

⁹³ See Phillip E. Areeda & Donald F Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 637 (1975). See also Bruce H. Kobayashi, *The Economics of Loyalty Discounts and Antitrust Law in the United States*, 1 COMP. POLICY INT’L 115, 129 (2005); Frank H. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 333-34 (1981); John S. McGee, *Predatory Pricing Revisited*, 23 J. LAW & ECON. 289 (1980); John S. McGee, *Predatory Price Cutting: The Standard Oil (N.J.) Case*, 1 J. L. & ECON. 137 (1958).

⁹⁴ See Kobayashi, *supra* note 93. See also C. C. von Weizsacker, *A Welfare Analysis of Barriers to Entry*, 11 THE BELL J. ECON. 399 (1980); Harold Demsetz, *Barriers to Entry*, 72 AM. ECON. REV. 47 (1982) (discussing welfare-based standards for evaluating barriers to entry).

⁹⁵ See, e.g., Benjamin Klein, *Market Power in Antitrust: Economic Analysis After Kodak*, 3 SUP. CT. ECON. REV. 43 (1993).

⁹⁶ See *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993) (setting out standard for predatory pricing to require both below cost pricing and a dangerous probability of recouping its investment in below cost prices).

⁹⁷ See Yahya, *supra* note 9.

discussed more fully below. Even in an individual claim the recovery may not reflect the full social benefit, including deterrence value, of the suit. It follows that allowing short-selling might efficiently supplement other compensation to the plaintiff or his lawyer for producing the information that led to the suit. This is especially true if long positions alone will provide inadequate incentives, or if such positions are legally restricted.⁹⁸ Given the ambiguity of the incentive issue, it is not surprising that multiple recoveries, including criminal fines and civil damages, punitive damages, and shifting costs and fees are common in the American legal system.

This subpart begins by discussing the information effects of the lawsuit. Section 2 discusses the positive incentive effects of outsider trading in light of this information. Section 3 analyzes the main argument against allowing such trading – the potential perverse incentives the trading adds. Sections 2 and 3 focus on dumping and suing by class action lawyers, since from a theoretical standpoint their incentives are likely to matter more than the incentives of individual class members or the class representative. Section 4 discusses a leading example of “dumping and suing” by a class plaintiff which has triggered public debate of trading in this setting.

1. Information effects of the lawsuit

Any lawsuit involves a positive probability of recovery of damages.⁹⁹ The suit also will entail direct and indirect litigation expense, including legal fees, diversion managerial time and attention, disrupting supplier and distributor relationships, and deterring acquisitions.¹⁰⁰ There is significant data indicating that lawsuits have negative reputation or other effects on defendants’ value beyond the actual or potential recovery.¹⁰¹

⁹⁸ See generally, Stephen Bainbridge, *Insider Trading Under the Restatement of Law Governing Lawyers*, 19 J. CORP. L. 1 (1993) (discussing ethical rules as a bar to lawyers making trading profits).

⁹⁹ The information effect of a securities fraud class action may be more complex and ambiguous because the action involves fraud that affected the price of the stock – that is, misconduct affecting the corporation’s own present or former shareholders – rather than misconduct directed against a party that is completely separate from the corporation. The defendants most likely to be held liable may be individual insiders rather than the corporation, particularly if the corporation is failing or has failed. Also, the suit may bring relief for investors that offsets any detriment they may incur through the effect of recovery on the value of their shares. A purchase or sale of those shares would capitalize the offsetting effects of the suit on both the shares and the corporation. The discussion in this subpart assumes, along with previous writers, that the net of all these effects is negative for the price of the stock.

¹⁰⁰ See Janet Cooper Alexander, *Rethinking Damages in Securities Class Actions*, 48 STANFORD L.REV. 1487, 1503 n.68 (1996). In the securities litigation situation, these facts may have a feedback effect in that the expectation of a costly suit increases the amount by which the stock drops on a negative disclosure, thereby further increasing damages. See Richard A. Booth, *Who Should Recover What in a Securities Fraud Class Action?* (February 2005), U of Maryland Legal Studies Research Paper No. 2005-32, available at <http://ssrn.com/abstract=683197>. On the other hand, the feedback is limited by the fact that the market will discount both the likelihood and likely success of the litigation. See Bradford Cornell & James Ruten, *Market Efficiency, Crashes and Securities Litigation*, available at <http://ssrn.com/abstract=871106>.

¹⁰¹ See Yahya, *supra* note 9 (discussing negative effect of lawsuits on the stock price of firms). See also Sanjai Bhagat, John Bizjak, & Jeffery L. Coles, *The Shareholder Wealth Implications of Corporate Lawsuits*, 27 FIN. MGMT. 5 (1998) (event study showing negative abnormal returns in response

A lawsuit, however, seldom comes out of the blue. It is often preceded by facts as to the underlying cause of action, which alone signal that a lawsuit may be on the way. With respect to securities class actions, this signal may be inherent in a sharp drop in the firm's shares following a disclosure, on the assumption that a class action lawyer will try to link the disclosure with an earlier misrepresentation or non-disclosure. *Dura Pharmaceuticals, Inc. v. Broudo*¹⁰² can be read as requiring the complaint to allege a corrective disclosure as evidence of the effect of the misrepresentation.¹⁰³ In non-securities cases, a class action or other significant suit that is likely to have stock price effects often follows a news of the underlying wrong. In our litigious society, a lawsuit cannot be far away.

The question, then, is what the lawsuit itself adds to what the market already knows. Even if some facts relating to the underlying claim already have been publicly disclosed, the filing of the lawsuit may provide additional information as to the nature and validity of the claim, and at least settles any initial doubt as to whether a suit will be filed. Moreover, whether and to what extent the lawsuit affects the price may depend on how the market perceives the quality of the suit. That may depend on the quality of the complaint and on the lawyer's reputation.¹⁰⁴ As discussed in the next section, the ability to engage in outsider trading may encourage lawyers to internalize these reputation effects.

2. Positive incentive effects of outsider trading

Assuming the filing of a lawsuit adds information that is capitalized in the price of the defendant's stock, there is a further question whether permitting trading can provide positive litigation incentives. This section focuses on the incentives between the lawyer and the plaintiff class, turning at the end to the incentives of individual plaintiffs.

In a class action, the plaintiff lawyer gets only a portion of the total recovery. This creates potential agency costs between the lawyer and the plaintiff class. The extent of these costs depend both on how the compensation is determined and on the existence of other agency cost control devices.

to the filing of a lawsuit). See also John Bizjak & Jeffery L. Coles, *The Effect of Private Antitrust Litigation on the Stock Market Valuation of the Firm*, 85 Am. Econ. Rev. 436 (1995); Kathleen Engelmann & Bradford Cornell, *Measuring the Cost of Corporate Litigation: Five Case Studies*, 17 J. LEG. STUD. 377 (1988); David M. Cutler & Lawrence H. Summers, *The Costs of Conflict Resolution and Financial Distress: Evidence from the Texaco-Pennzoil Litigation*, 19 RAND J. Econ. 157 (1995); Michael I. Muoghalu, David H. Robison, & John L. Glascock, *Hazardous Waste Lawsuits, Stockholder Returns, and Deterrence*, 57 S. ECON. J. 357 (1990); Michael Muoghalu & John E. Rogers, *The Economic Impact of Superfund's Litigation on the Value of the Firm: An Empirical Analysis*, 16 J. ECON. & FIN. 73 (1992); Benoit Laplante & Paul Lanoie, *The Market Response to Environmental Incidents in Canada: A Theoretical and Empirical Analysis*, 60 S. Econ. J. 657 (1994).

¹⁰² 125 S.Ct. 1627 (2005).

¹⁰³ See Larry E. Ribstein, *Fraud on a Noisy Market* (September 16, 2005), U Illinois Law & Economics Research Paper No. LE05-022, available at <http://ssrn.com/abstract=803064>, forthcoming Lewis & Clark L. Rev. (discussing various interpretations of *Dura*).

¹⁰⁴ See Mukesh Bajaj, et al., *Securities Class Action Settlements: An Empirical Analysis*, available at <http://securities.stanford.edu/research/studies> (showing a sixty-one percent increase in the median settlement when Milberg, Weiss was the class counsel).

An important existing device for addressing these agency problems is the fee award in class actions. We have previously discussed the problem that class action fees may not adequately compensate complaint-drafting, particularly where the complaint-drafter does not ultimately become the lead attorney.¹⁰⁵ In particular, we have suggested incentivizing lawyers who write socially valuable class action complaints through fee awards that do not depend on the winner-take-all lead plaintiff selection under the current version of the Private Securities Litigation Reform Act (PSLRA). If our proposal or a comparable proposal is not adopted, and possibly even if it is, attorneys may have inadequate or perverse incentives.¹⁰⁶ Allowing trading would reduce the significance of whether the lawyer was made lead counsel, and therefore might reduce the resources wasted on jockeying for position in this context. Trading prior to filing the lawsuit also can provide more efficient incentive compensation by unbundling pleading and conduct of the litigation.¹⁰⁷

The PSLRA addresses agency costs in class actions by requiring the court to select as lead plaintiff one who has an incentive to monitor the lawyer – specifically, the plaintiff with “the largest financial interest in the relief sought by the class.”¹⁰⁸ However, this is unlikely to be a complete solution to agency problems, since even such a plaintiff probably has only a small percentage interest in the total recovery and claim that is tiny in relation to the plaintiff’s portfolio.

There are other potential devices for aligning class action lawyers’ incentives with those of the class. The lawyer may finance the litigation by essentially securitizing the potential fee. This can have the effect of shifting risk to the public shareholders of the financing entity. In a securities class action, this would align the risk preferences of the lawyer with those of the diversified shareholders in the plaintiff class. However, there are still agency costs inherent in the fact that the lawyer only receives a portion of the recovery, as well as additional agency costs between the lawyer and the financier.¹⁰⁹ Lawyer-client agency costs might be eliminated by auctioning the claim itself to the lawyer. However, the courts do not yet allow this option.¹¹⁰

¹⁰⁵ See Kobayashi & Ribstein, *supra* note 17.

¹⁰⁶ Moreover, even if the lawyer fully shares in the recovery, this recovery may not reflect the deterrent value of the lawsuit, given the difficulties of fashioning relief. See Ribstein, *supra* note 48.

¹⁰⁷ For a discussion of other incentive problems in class actions, see Theodore Eisenberg and Geoffrey P. Miller, *Incentive Awards to Class Action Plaintiffs: An Empirical Study* (December 7, 2005), NYU Law and Economics Research Paper No. 06-03, available at <http://ssrn.com/abstract=869308> (examining incentive awards to named plaintiffs as a solution to a free-rider problem); Geoffrey P. Miller, *Some Agency Problems in Settlement*, 16 J. LEG. STUD. 189 (1987) (examining divergence in incentives to settle); Geoffrey P. Miller, *Payment of Expenses in Securities Class Actions: Ethical Dilemmas, Class Counsel, and Congressional Intent*, 22 REV. OF LIT. 557 (2003).

¹⁰⁸ 15 U.S.C. § 78u-4(a)(3)(B)(iii)(I)

¹⁰⁹ For a discussion of the incentive effects, see Larry E. Ribstein, *Financing Lawsuits*, Ideoblog, February 14, 2006, available at http://busmovie.typepad.com/ideoblog/2006/02/financing_lawsu.html.

¹¹⁰ For discussions of the use of auctions in class actions, see John C. Coffee, Jr., *The Unfaithful Champion: The Plaintiff as Monitor in Shareholder Litigation*, 48 LAW & CONTEMP. PROBS. 5 (1985); Jill E. Fisch, *Lawyers on the Auction Block: Evaluating the Selection of Class Counsel by Auction*, 102 COLUM. L. REV. 650 (2002).

Using trading profits to reward class action attorneys who discover new claims would sharpen the role of attorneys as monitors of the firm, analogous to institutional shareholders, bidders for control, auditors and transactional lawyers. Fees based on a percentage of the total recovery generate agency costs between the class and their attorney because they give lawyers inadequate marginal incentive litigate,¹¹¹ and an incentive to accept inadequate settlements.¹¹² Trading profits, by better tying the attorney's effort to his compensation, can mitigate such agency costs.

To see how trading profits can improve attorneys' incentives, consider a class action lawsuit where the plaintiff's lawyer expects to recover a percentage of the total recovery a .¹¹³ The lawyer invests effort x , which in turn affects the expected recovery. The expected recovery will also be a function of the effort of the defendant (y). In the absence of trading profits, the lawyer will choose his level of effort x to maximize his net expected benefit, or $aE(x,y) - x$, where $E(x,y)$ is the plaintiff's expected recovery. The plaintiff's lawyer will choose a level of effort without trading profits x^c that sets the marginal benefits of his fractional recovery equal to the marginal cost of his effort. More formally: :

$$a[E'(x,y)] = 1, \text{ where } E'(x,y) \text{ is the partial derivative of } E(x,y) \text{ with respect to } x.$$

In contrast, the joint recovery of the client and attorney is maximized when

$$E'(x,y) = 1.$$

If x^* is the amount of attorney effort that solves this condition, it is easy to confirm that the lawyer's level of effort under a standard percentage of recovery contract will be less than the level that would maximize the joint recovery of the client and attorney. That is, $x^c < x^*$.¹¹⁴ In other words, in the absence of trading profits, the lawyer will invest less effort on the case than what would maximize the joint recovery of the attorney and client as long as the lawyer receives only a fraction of the recovery, or $a < 1$. Indeed, the lawyer may not take the case at all if the percentage of recovery will not cover the costs the lawyer would have to invest to produce a recovery, *i.e.*, if $aE(x^c, y^c) < x^c$.

Now suppose the lawyer is allowed to short k shares of the defendant's stock prior to initiating the suit. Trading profits will equal $(k/N)(S^0 - S^1)$, where S^0 is the price of a share of stock prior to the public announcement of the suit, S^1 is the price after the public

¹¹¹ See Bruce L. Hay, *Contingent Fees and Agency Costs*, 25 J. LEG. STUD. 503 (1996).

¹¹² See Miller, *supra* note 107, Bruce L. Hay, *Optimal Contingent Fees in a World of Settlement*, 26 J. Leg. Stud. 259 (1997).

¹¹³ The fraction a could be the standard percentage of recovery, or also can reflect uncertainty regarding whether the lawyer that invested in the litigation will be the lawyer

¹¹⁴ This problem is a variant of the familiar agency cost/shirking result generated by share contracts. See generally, Steven N. S. Cheung, *Private Property Rights and Sharecropping*, 78 J. POL. ECON. 1107 (1968) (discussing traditional literature noting agency cost problem). In the setting of a tenant farmer, the contract between the principal and agent will be altered to mitigate such agency costs. However, the ability of the class action lawyer to contractually solve such problems can be truncated by the unique nature of the relationship between the class action lawyer and the class, and by ethical rules against maintenance.

announcement, and N are the number of outstanding shares. If the initial price S^0 does not anticipate the suit, while S^l does, the difference $S^0 - S^l$ will equal the sum of the traded firm's expected liability, reputational costs and litigation expenses, $E(x,y) + \delta y$.¹¹⁵ With trading profits, the lawyer will now choose to maximize

$$aE(x,y) + (k/N)(E(x,y) + \delta y) - x.$$

For credible suits, marginal incentives increase, as the lawyer will set x according to

$$[a + k/N][E'(x,y)] = 1.$$

If we denote the solution to this as x^l , one can easily confirm that $x^l > x^c$. Note that $x^l <(>) x^*$ as $k/N <(>) 1-a$. If a is interpreted as the standard percentage of recovery, it is unlikely that $k/N > 1-a$.¹¹⁶ Thus, trading profits are likely to at least partially restore the class lawyer's marginal incentives to invest in the case. Thus, the lawyer will internalize the benefit of his effort to the extent that additional effort increases his trading profits ($(k/N) E'(x,y)$) in addition to his fractional share of the marginal increase in the expected recovery ($aE'(x,y)$). To the extent that the short position serves to communicate the attorney's improved incentives and commitment to the case, the lawyer would have an incentive to voluntarily disclose his trading position.

The lawyer must hold his position until his efforts are reflected in stock price in order for trading profits to affect his marginal incentives. In other words, the lawyer's marginal incentives are improved only if his trading profits are affected by the lawyer's current effort x . Dumping and suing can improve the lawyer's marginal incentive to invest effort in complaint-writing even if the lawyer covers his short position immediately after the information effects of the complaint are incorporated into the firm's stock price and the lawyer is not involved in litigating or settling the case.

The lawyer's position in the defendant corporation's stock can serve as a marginal incentive to litigate the case to judgment or to an appropriate settlement if the lawyer does not cover or liquidate the position prior to judgment or settlement. Disclosure of the cover or liquidation would result in an increase in the stock price of the defendant firm to reflect the expected increase in the plaintiff lawyer's level of agency costs and the resulting decrease in the defendant's expected liability and litigation costs. To prevent this rise in the defendant's stock price and decrease in the lawyer's trading profits, the lawyer has an incentive to hold the position, or not disclose the liquidation or hedging of the position.

Even a lawyer who liquidates and covers immediately after filing the complaint might, in effect, capitalize on effort expended thereafter. This effort may contribute to developing a reputation for following through on the case that increases the stock price effect of filing future complaints. Conversely, a lawyer who holds or fails to cover

¹¹⁵ Under the assumption settlement is not possible, the price of the firm will fall by the plaintiff's expected recovery plus the cost of taking the case to judgment, y . The potential for settlement requires the model to consider the bargaining outcome, and the cost savings from settling rather than litigating. For simplicity, the model assumes that any settlement will reflect the expected judgment if the case went to trial, but that actual costs of achieving a settlement will be a fraction δ of the costs of litigating the case to judgment.

¹¹⁶ Suppose that $a = .30$. This condition would hold only when the lawyer took a short position on over seventy percent of the outstanding shares.

during the long period following the complaint in which the claim is being liquidated may not thereby receive significant compensation for his efforts because even a favorable outcome may not compensate the lawyer for his risk entailed in reducing the diversification of his portfolio. This suggests that the main incentive effects of pre-complaint stock positions may be that associated with a sale or cover immediately after the filing of the complaint.

In addition to improving marginal litigation incentives, dump and sue profits can also improve settlement incentives and reduce agency costs in settlement. A client's effective control over the decision to litigate or settle the case, as in the traditional attorney-client contract, mitigates agency costs in settlement. However, in the absence of effective client control, an attorney with a standard percentage of recovery fee contract will have weak settlement incentives.

To see this effect of trading profits on settlement incentives, consider the incentives of an attorney to settle a case in the absence of trading profits. Under these conditions, the plaintiff's lawyer will want to accept a settlement offer S as long as

$$aS > aE(x,y) - x, \text{ or equivalently, } S > E(x,y) - x/a.$$

In other words, the lawyer will be willing to accept a settlement offer that is less than the expected recovery that results from the joint efforts of plaintiff and defendant by the amount of additional effort the lawyer must invest to produce that settlement (x) divided by the percentage of the reward the lawyer will receive from that effort (a). In contrast, client settlement incentives would be to accept settlement offers where

$$(1-a)S > (1-a)E(x,y), \text{ or equivalently } S > E(x,y).$$

This means that the client would accept a settlement only if it is more than the expected recovery, without subtracting any amount for an additional effort to produce that recovery. On the other hand, assume the attorney can earn trading profits. In this case, the attorney will accept offers S where

$$aS > (a+k/N)(E(x,y)) - x + (k/N)y, \text{ or equivalently,}$$

$$S > [E(x,y) - x/a] + (k/N)(1/a)[E(x,y) + y].$$

Thus, trading profits increase the minimum amount the attorney is willing to accept, and thereby reduce the divergence in settlement incentives between the attorney and client.

The trading profits provide better settlement incentives only if the lawyer holds or fails to cover until settlement. On the other hand, as also discussed above, the lawyer may derive little net benefit for holding or failing to cover even if his effort produces a positive result. It follows that the main incentive effect on settlement of the lawyer's holding a stock position may be if the lawyer has developed a reputation for following through on the complaint, including holding out for client-maximizing settlements, that the lawyer can capitalize on merely by filing the complaint. Conversely, as discussed further below, a lawyer known for suits that are merely "strikes" for fees might receive a significantly lower payoff from dumping and suing.

These improved incentives for both litigation and settlement have general implications for corporate governance. Trial lawyers may be better monitors in some respects than the conventional monitors such as outside directors because their incentive to uncover and punish wrongdoing is less diluted by the presence of conflicting

relationships. However, trial lawyers may have lower quality information because they are outside the firm. Thus, as discussed more fully below in Section II.C.3, there may be a problem in giving them excessive incentives to sue.

The above discussion concerns the agency problems between the plaintiff class and the lawyer in a class action. There are also potential agency costs between the individual class representative and the class. Since the individual plaintiff only receives a pro rata portion of the recovery, the plaintiff internalizes only a small portion of the social benefit of the suit, and therefore likely has socially inadequate incentives to sue and to prosecute the suit to full recovery. This incentive problem is mitigated by the fact that the individual plaintiff does not have to bear the fees and costs of maintaining the suit. This means that the lawyer is the main party at interest in class actions, and is therefore the appropriate focus of any analysis of incentives. However, the individual plaintiff's incentives also may matter, since the individual plaintiff is better situated than other class members to monitor the lawyer for the plaintiff. As illustrated by the Terayon case, discussed below in section II.C.4., an individual class plaintiff may engage in dumping and suing. This situation will be analyzed further below. For present purposes it is worth noting that, from a theoretical standpoint, this trading may give the plaintiff incentives to monitor the lawyer.

Finally, in individual suits, trading would likely be by the client rather than the lawyer. The lawyer's trading would need to be authorized by the client, and even if authorized may violate ethical rules against conflicts of interest.¹¹⁷ Anyway, it is not clear in this situation why the client would want to authorize the lawyer to trade rather than trading himself. While the trading theoretically could motivate better work by the lawyer, the client is in a better position to monitor in individual than in class litigation. Assuming the client himself trades, the basic incentive story is the same as for attorney trading in class actions: permitting outsider trading may encourage the filing of lawsuits that might not be cost-justified in the absence of the trading. Even if the individual client internalizes the entire private benefit from the suit, the suit may have social benefit, particularly including deterrence value. Thus, a potential plaintiff may not file a socially valuable lawsuit if direct and indirect litigation expenses and fees exceed private but not social benefits. The cost to the corporation, which is capitalized in its stock price, including reputational cost, may provide a rough and partial proxy for the social benefits of the suits.

3. Perverse incentive effects

As discussed at the beginning of this subpart, the main argument against allowing dumping and suing is that such trading is likely to provide excessive incentives to sue – that is, will have a greater effect in encouraging socially unproductive lawsuits than in encouraging socially beneficial lawsuits. Although this is sometimes stated as a concern about “double recovery,” this way of stating the problem erroneously assumes the answer to the question of whether incentives in the absence of outsider trading are socially optimal.

There are several reasons why any extra incentives to sue provided by outsider trading may be, at least in theory, socially inefficient. First, the plaintiff might have an incentive to trump up baseless allegations just shy of the Rule 11 level and collect profits before the true nature of the allegations are discovered. These problems might be

¹¹⁷ See Bainbridge, *supra* note 98.

reached directly by Rule 11 or other penalties against abusive litigation.¹¹⁸ However, it may be difficult for courts or legislatures to devise rules and standards that can distinguish between abusive and productive litigation, particularly at the pleading stage. It follows that abusive litigation may be more effectively disciplined by reducing perverse incentives in other ways, including by reducing financial incentives to sue.¹¹⁹ However, the incentive provided by dumping and suing is probably not particularly problematic because it is self-limiting – the trading profits depend on the market’s reaction to the suit, which in turn depends on the market’s perception of the suit’s quality. In terms of the model in section 2, both $E(x)$ and δ will be small under these circumstances, making any effect from the trading profits small.¹²⁰ Thus, in the case of nuisance suits, trading profits resulting from short positions are unlikely to raise problems as long as such suits are appropriately valued by the market.

Second, there is a potential concern that outsider trading may increase suits whose expected value is based on a significant chance that the defendant will be wrongly held liable at trial or held liable for excessive damages. In either case, the availability of trading profits can increase the frequency and cost of type I errors. However, since reducing incentives to sue would also reduce socially beneficial suits, and thereby increase type II errors, the better solution would be to address the underlying source of legal error rather than to try to suppress lawsuits generally through the loss of incentives yielded by trading profits.¹²¹

A third concern is that outsider trading on litigation is with claims that are inherently socially unproductive, so that any increased incentive to sue is perverse. In this situation, there is no concern with type II errors – the law should deter all such claims. This may be the case with securities class action under the fraud-on-the market

¹¹⁸ See Bruce H. Kobayashi & Jeffrey S. Parker, *No Armistice at 11: A Commentary on the Supreme Court’s 1993 Amendment to Rule 11 of the Federal Rules of Civil Procedure* 3 SUP. CT. ECON. REV. 93 (1993).

¹¹⁹ See, A. Mitchell Polinsky and Daniel L. Rubinfeld, *Sanctioning Frivolous Suits: An Economic Analysis*, 82 GEO. L. J. 397 (1993) (discussing use of penalty adjustments and decoupling recovery by the plaintiff from the penalty imposed on the defendant). See also Steven Shavell, *Suit, Settlement, and Trial: A Theoretical Analysis under Alternative Methods for the Allocation of Legal Costs*, 11 J. LEG. STUD. 55 (1982) (discussing fee shifting and incentives to sue); David Rosenberg & Steven M. Shavell, *A Solution to the Problem of Nuisance Suits: The Option to Have the Court Bar Settlement* (August 2004), Harvard Law and Economics Discussion Paper No. 489, available at <http://ssrn.com/abstract=623285>, forthcoming INT. REV. L. & ECON. (discussing limiting the ability to settle).

¹²⁰ Several authors have suggested ways in which litigants can credible bring negative expected value suits. See Lucian A. Bebchuk, *Suing Solely to Extract a Settlement Offer*, 17 J. LEG. STUD. 437 (1988); Lucian A. Bebchuk, *A New Theory Concerning the Credibility and Success of Threats to Sue*, 25 J. Leg. Stud. 1 (1996); Bradford Cornell, *The Incentive to Sue: An Option Pricing Approach*, 19 J. LEGAL STUD. 173 (1990).

¹²¹ Indeed, to the extent that litigation will drive the law towards the efficient rule, the long term solution may be to encourage litigation of inefficient rules. See William M. Landes & Richard A. Posner, *Adjudication as a Private Good*, 6 J. LEG. STUD. 235 (1979); George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J. LEG. STUD. 65 (1977); Paul H. Rubin, *Why is the Common Law Efficient?* 4 J. LEG. STUD. 51 (1977); Paul H. Rubin and Martin Bailey, *The Role of Lawyers in Changing the Law*, 21 J. LEG. STUD. 807 (1994) (discussing how interest group influence can alter the evolution of the law towards efficiency).

theory, which appear mainly to uselessly transfer money from one set of diversified shareholders to another, thereby creating significant deadweight losses.¹²² In other cases, damages may significantly exceed any measure of reasonable compensation. However, even with pocket-shifting or other concerns with compensation-based recovery, the suit may be socially productive because it has deterrence value, which again raises the question whether permitting outsider trading would result in more socially productive litigation. Moreover, if it is clear that the litigation is not socially productive, the appropriate solution is to eliminate the legal basis of recovery rather than to have a general rule against dumping and suing that may apply to efficient as well as inefficient claims.

Fourth, outsider trading profits may be inefficient because they give lawyers socially excessive incentives to search for litigation information that would, in any event, be produced without their efforts. The general problem of excessive search is discussed below.¹²³ For present purposes it is worth noting that, if the lawyer's activity speeds public disclosure, then such activity may have social value. If, however, early disclosure has little value, this raises a more important question of the social value of the underlying claim. In particular, regarding federal securities fraud liability, if securities fraud will be discovered without litigation, then this obviously reduces the deterrence justification for a fraud remedy.

In summary, the argument that dumping and suing provides perverse incentives to sue is generally better addressed to the underlying claim than to the incentive issue. A general prohibition of outsider trading in this situation, as in the others discussed in this Article, might deter socially productive as well as socially perverse conduct. To the extent that dumping and suing may provide incentives for socially inefficient conduct, it is better to address this conduct directly rather than indirectly through incentives.

4. The Terayon example

The above analysis may be illustrated through the currently leading example of dumping and suing, the recent dismissal of the lead plaintiffs in the securities class action against Terayon Communications.¹²⁴ The case involved a class action suit filed on April 13, 2000, the day after the company's stock fell from \$163 per share to \$120 per share. The complaint, which was certified on the day before the stock price fell, alleged that Terayon had made false or misleading statements regarding the likelihood that its cable modem technology would be approved by an industry standard setting body.¹²⁵ Since the

¹²² See Alexander, *supra* note 100 at 1503 (noting that, to a significant extent, "payments by the corporation to settle a class action amount to transferring money from one pocket to the other, with about half of it dropping on the floor for lawyers to pick up. Such transfers are not in the economic interests of continuing shareholders"). For other criticisms of fraud-on-the-market actions, see Ribstein, *supra* note 48.

¹²³ See *infra* text accompanying note 167.

¹²⁴ In re Terayon Communications Systems, Inc. Securities Litigation, No. C00-01967 MHP, Memorandum and Order (ND Cal. Feb 23, 2004) (dismissing lead plaintiffs). See Reynolds Holding, *Cardinal can't lead suit against Terayon. Investment firm disqualified over conflict of interest*, San Francisco Chronicle, Feb 28, 2004; Rachel McTague, *WLF Awaits Results of FOIA Requet; Sees SEC Info on Class Suit, Short Sellers*, 37 Sec. Reg. & L. Rep. 1447 (2005); Yayha, *supra* note 9 (discussing case).

¹²⁵ See Reynolds Holding, *Double Whammy in Stock Fraud Case. Short Sellers Trash, Then Sue Santa Clara Tech Firm*, San Francisco Chronicle, November 9, 2003.

stock drop in itself did not indicate the reason, the complaint arguably revealed negative information about the company. On April 14, 2003, Cardinal Partners filed its certification of Named Plaintiffs, and was subsequently named as one of the lead plaintiffs. Its lawyers, Milberg, Weiss, were named lead counsel.

Cardinal's appointment as one of the lead plaintiffs was based on its purchase of 6,000 shares of Terayon's stock at \$269 per share in early March of 2000. Cardinal characterized the purchase as a "hedge," but did not disclose that, by March of 2000, it had amassed a short position in excess of 500,000 shares and had acquired put options in early April. The short positions, some of which were taken when Terayon's stock was selling near \$40 per share, exposed Cardinal to a potential loss of over \$80 million dollars if the stock price did not fall before these positions had to be executed. Moreover, beginning in October 1999, Cardinal began publicly disseminating negative information accusing Terayon of committing fraud in an effort to bring down Terayon's stock price. Despite negative information given to the SEC, the NASD, the Federal and state attorneys general, news organizations such as the Wall Street Journal and Fortune Magazine, and web sites, the stock price continued to rise along with the NASDAQ market.

The memorandum and order removing Cardinal and another firm as lead plaintiffs expressed concern about their undisclosed short positions in Terayon. Because plaintiffs' predominant short positions could undermine the class plaintiffs' claims based on a fraud on the market theory, the court ruled that they could not meet the typicality and adequacy of representation requirements of Rule 23.¹²⁶ The judge also questioned whether Milberg, Weiss should continue as class counsel based on the fact that it did not disclose the client's short positions. This case suggests that short selling may affect an individual's ability to sue for and recover damages – that is, that plaintiffs may not dump and sue.¹²⁷

The case illustrates the potential problem inherent in dumping and suing of providing perverse incentives to produce untrue negative information and false positives. Plaintiff's theory was that Terayon committed fraud by overstating the probability that its technology would be approved by the industry's standard setting body. However, on August 31, 2001, Cable Labs, the industry group that establishes uniform standards for cable modems, announced that the next version of specifications *would* include Terayon's technology. While Terayon still might have falsely overstated the probability that its standard eventually would be accepted by Cable Labs during the latter part of 1999, this fact casts doubt on Cardinal's theory. Cardinal's campaign of negative information may have been mistaken or knowingly false. In either case, this version of the facts would make any stock drop in response to Cardinal's release of negative information a Type I error. Moreover, even if Cardinal's theory was correct, its activities may not have increased social welfare. Cardinal may have had excessive incentives to find and disseminate negative information about Terayon after it began shorting Terayon's stock. The dissemination of negative information might have caused the same type of market harm as any misrepresentations by Terayon.

¹²⁶ See Memorandum and Order, *supra* note 124. Indeed, for these reasons, Milberg, Weiss did not seek class representative status for the short-selling plaintiffs.

¹²⁷ Technically, plaintiffs did not dump the stock (i.e., remove a long position by selling). Rather, they were holding a short position that would benefit from ongoing investments in gathering information and litigation.

Cardinal's perverse incentives do not, however, support an argument for disallowing all short sales by class action plaintiffs. If, as Terayon maintains, Cardinal knowingly engaged in a campaign of disinformation, the solution to such a problem is to penalize the making of false or misleading statements,¹²⁸ rather than a general legal rule against dumping and suing that could suppress truthful negative information.¹²⁹ Moreover, any perverse incentives regarding negative information are related to short-selling generally and not to suing.¹³⁰ Indeed, since a lawsuit identifies the short seller, and since short-selling may compromise the seller's litigation position, plaintiff-sellers would seem *less* like to engage in misconduct than other short-sellers.

Finally, it is worth emphasizing that the Terayon illustration involved dumping and suing by the individual plaintiff rather than the class lawyer.

D. BOYCOTT

Situation D, the boycott situation outsider trading scenario, is exemplified by the activist who established an anti-Coke hedge fund for the purpose of shorting Coke prior to a planned boycott, and then realizing profits by buying the shares after the announcement of the boycott.¹³¹ If the boycotter bears the costs of organizing and carrying out the boycott but the benefits of the boycott are widespread, trading profits can refocus some of the diffuse benefits of the boycott back to the person or organization that bears the costs of discovering and disseminating the information. In this sense, the trading profits are similar to the trading profits of the plaintiff discussed in Part C. However, unlike the litigation scenario, the traded firm that is the boycott target has not engaged in activity that would generate a viable legal claim. Thus, trading profits do not supplement legal damages, but rather are the primary and perhaps only source of pecuniary gain.

The main question here is whether allowing outsider trading would encourage non-socially-productive boycotts just for the purpose of earning trading profits. This is analogous to the non-productive lawsuit scenario discussed in part C.3. As with lawsuits, the potential for trading profits may depend on the boycotter's reputation, which affects the market's evaluation of the potential effect of the boycott. The profits also may depend on the seriousness of the social problem that the boycott exposes or disciplines.

¹²⁸ See Washington Legal Foundation, Complaint Requesting Investigation of Short-Selling in Class Action Lawsuit, In re: Terayon Communication Systems, Inc. Securities Litigation, No. C00-1967 MHP (N.D. Calif.). See also Yahya, *supra* note 9 (discussing liability for market manipulation and its application to short seller's misleading statements).

¹²⁹ Indeed, it is not even clear how much the market was misled by such conduct. While the Terayon complaint linked the 25 percent drop to information disclosed at a conference call on April 11, much of the drop would not have been an abnormal return, as the NASDAQ suffered a record one day loss on April 13, 2000. Thus, the market may have correctly discounted Cardinal's self serving statements. This result would have been even more likely if Cardinal had disclosed its large short position and that it was the source of much of the negative information.

¹³⁰ For an example of short-selling possibly coupled with misleading information but unrelated to a lawsuit, see John R. Emshwiller, *Street Sleuth Stock Brawl: Overstock.com President And Firm's Naysayers Trade Punches*, Wall St. J., September 27, 2005 at C1, available at http://online.wsj.com/article/0,,SB112777873136852757,00.html?mod=todays_us_money_and_investing.

¹³¹ See Ribstein, *supra* note 23.

The boycotter can maximize trading profits by both picking worthy causes and acquiring a reputation as an effective boycotter.

The counter-argument is that allowing trading can encourage empty threats that the market may not be able to fully evaluate. Unlike the lawsuit scenario, there is no third party judge to evaluate the bona fides of the underlying act. Moreover, the would-be boycotter might be able to cause damage without engaging in actionable misrepresentations because of the difficulty of proving a false statement of intention.

However, as noted immediately above, the boycott is likely to affect stock price only if the boycotter has a reputation for following through. Making empty threats could seriously undercut this reputation. Moreover, without a reputation or some other way to credibly commit to following through, the market is unlikely to place a high value on a boycott threat. One potential way to boost the accuracy of the signal is through a market for reputable boycott leaders who accept causes that are likely to result in successful boycotts.

E. WHISTLEBLOWING

Situation E, involving whistle-blowing by non-insider employees, is analogous to the *Dirks* case. Equity Funding was a high-flying, very credible, company that was actually a mirage.¹³² A former vice president, Ronald Secrist, was interested, for revenge or some other reason, in uncovering the fraud. He had been unable to get anyone to believe him, and thought a sudden drop in Equity Funding stock would get regulators' attention and prevent insiders from liquidating their holdings and escaping with the loot. So Secrist took his story to Ray Dirks, a leading insurance analyst, who tipped his clients, which pushed the stock price down and led to exposure of the fraud.

Unlike the whistle-blowing hypothetical, the profits went to Dirks and his clients rather than the whistleblower. Dirks was rewarded not as a whistleblower but as an analyst whose investigative efforts were instrumental in uncovering the story. Dirks had to verify and ultimately stake his own reputation on an inherently incredible story. In choosing to focus on the broader issue of authorizing analysts to trade on information advantages, the Court chose not to address the issue of whether insiders ought to be able to trade on information about a corporation's wrongdoing.

In the typical whistle-blowing scenario, the whistleblower, like Secrist, may lack both capital and credibility. Thus, the whistleblower will not necessarily expose the fraud by trading, and will have to find a Dirks-like intermediary. Trading incentivizes people with information to engage in efforts to expose the fraud. This incentive is important since, unlike Secrist, the most reliable and informed whistleblowers may be currently employed and face significant negative consequences from acting on their information.

Trading profits can provide a more effective incentive scheme than a whistle-blowing law. Under a whistle-blowing law, someone must determine what material information is and what the remedy should be. This has been a problem under the Sarbanes-Oxley Act, whose whistle-blowing scheme has been administered with little

¹³² See Dirks & Gross, *THE GREAT WALL STREET SCANDAL* (1974).

success by the oddly chosen Occupational Safety and Health Administration.¹³³ Thus, employees may have inadequate incentives to expose frauds committed by their employers. The employee generally gets only a fractional share, a , of the harm, H , discovered through his reporting. Moreover, recovery is uncertain, and whistle-blowers are often exposed to retaliation from which the law may not adequately protect them.¹³⁴ Thus, the return to becoming a whistleblower equals $G_W = \alpha aH - C - (1-\alpha)R$, where α is the probability that the whistleblower will be rewarded, C is the costs to the whistleblower of bringing the action, and R is the additional retaliation costs faced by the whistleblower when the action fails. All of these factors increase the likelihood that the return to whistle-blowing G_W is negative.

By contrast, allowing trading profits lets the whistleblower reap the value of her information through precise valuation in the efficient stock market. Moreover, trading enables the whistleblower to remain anonymous, and thereby avoid the direct costs associated with use of whistle-blower laws, including the penalties associated with retaliation. In addition, use of trading profits to compensate the whistleblower does not create some of the negative incentives associated with whistleblower laws and qui tam suits. For example, while whistleblowers have an incentive under these laws to delay reporting of misconduct in order to increase both the size and probability of recovery,¹³⁵ an employee with a short position has no incentive to further delay the disclosure of the negative information to the market.

Another potential source of incentives for whistleblowers would be to expand the scope of qui tam suits, which allow private parties to bring and maintain suits to assert claims on behalf of the government.¹³⁶ Qui tam suits are authorized under the 1986 amendments to the Civil False Claims Act (CFCA) against those who have submitted false claims for payment from or the reduction of payment to the government.¹³⁷ Under the CFCA the person who initiates the qui tam action, called the relator, is entitled to fifteen to twenty-five percent of the recovery if the government prosecutes the claim, and between twenty-five and thirty percent of any recovery if the government does not prosecute.

Qui tam actions have several potential advantages over other mechanisms for rewarding those who uncover wrongdoing. First, a qui tam action potentially permits greater rewards than whistle-blowing claims since the relator may be able to recover a higher percentage of the damages uncovered by the relator's disclosure than is generally available under whistle-blowing provisions.

¹³³ See Larry E. Ribstein, *Sarbanes-Oxley as Employment Law*, http://busmovie.typepad.com/ideoblog/2004/10/sarbanesoxley_a.html (October 4, 2004).

¹³⁴ See Ben Depoorter and Jef De Mot, *Whistle Blowing* (November 15, 2004). George Mason Law & Economics Research Paper No. 04-56, available at <http://ssrn.com/abstract=622723>, forthcoming SUP. CT. ECON REV.

¹³⁵ *Id.* Delay allows the harm to persist for a longer time, thus increasing damages and allowing the collection of better evidence.

¹³⁶ See generally, William E. Kovacic, *Private Monitoring and Antitrust Enforcement: Paying Informants to Reveal Cartels*, 69 GEO. WASH. L. REV. 766 (2001).

¹³⁷ 31 USCA §§ 3729-3731.

Second, unlike whistle-blowing claims, these rewards turn on the risks of recovering these claims in litigation. The mechanism for determining these risks is the government's decision whether to take over prosecution. The CFCA requires the relator to serve the Department of Justice with a copy of the complaint and disclose his material evidence and information. The complaint is placed under seal for sixty days, which allows the government to investigate the relator's claims. The government can prosecute or settle the action, allow the relator to bring the action, or ask the court to dismiss the action. This lets the government screen non-meritorious or difficult suits. However, sealing the complaint for sixty days while the government considers its merits seriously impedes information from reaching the market. At the same time, significantly reducing the screening period reduces any advantage of the qui tam procedure, particularly since a large number of claims would prevent effective screening in a shorter period.

Third, in comparison with class actions or other devices enabling volunteers to sue for damages, the qui tam procedure reduces incentives to engage in excessive search and litigation by limiting a relator to a fraction of the recovery. This feature of qui tam suits has an effect similar to that of proposals for decoupling punitive damages awards from the amount given to the plaintiffs.¹³⁸ On the other hand, this feature also reduces incentives for socially beneficial whistle-blowing.

The above discussion indicates that the choice between directly rewarding whistle-blowers through whistle-blower laws or qui tam actions and permitting them to reap trading profits again raises the general tradeoff between Type I and Type II error. Generally banning outsider trading, or allowing firms to ban outsider trading as Ayres & Choi propose, in effect channels whistle-blower rewards through these more conventional devices. While the benefit-burden tradeoffs may reflect efficient ways to balance excessive and inadequate incentives given a choice among these formal reward structures, permitting outsiders to reap rewards through trading may efficiently fill gaps in all these procedures without inviting excessive search. The main question, discussed below in Part III, is whether generally allowing outsider trading would involve greater costs than benefits.

F. TRADING ON ADVANCE KNOWLEDGE OF CONTRACTS

The basic facts in Situation F, involving advance trading on a corporation's potential contract, are similar to *State Teachers Retirement Board v. Fluor Corp.*¹³⁹ Allowing trading in this situation allows an outsider to capitalize on information that may originate from the traded firm in the limited sense that the value of the information depends at least partly on that firm's entering into the contract or not. However, the outsider presumably does not have non-public information that would permit it to evaluate the likelihood that the traded firm will take particular actions. The relevant information therefore concerns only the potential for action by the trader.

While the benefit from making the contract is likely to be realized in part through the contract, allowing trading allows the outsider to capture some of the surplus from the contract that otherwise would go to the traded firm, and therefore arguably gives the trader an extra incentive to enter into the contract. This could encourage the making of

¹³⁸ See generally A. Mitchell Polinsky and Yeon-Koo Che, *Decoupling Liability: Optimal Incentives for Care and Litigation*, 22 RAND J. ECON. 562 (1991).

¹³⁹ 654 F.2d 843 (2d Cir. 1981).

socially efficient contracts that would otherwise be deterred by, for example, bargaining costs in bilateral monopoly situations.

One difficulty with this scheme is that the traded firm can anticipate the possibility of trading profits and contract either to forbid the trading or to capture the trading profits. A traded firm that prohibited outsider trading except by express contract would require those intending to trade to disclose that fact to the firm. If the traded firm has the bargaining leverage to capture the surplus from the contract without the trading, it presumably could contract to capture the additional profits from the disclosed trading.¹⁴⁰

The question, then, is why the traded firm might permit its contracting partner to gain some of the contracting surplus through trading. One possible answer is that it may be difficult or impossible to cover all of the trading opportunities by contract. A major contract is likely to have economic implications, and therefore trading opportunities, up and down the supply chain, and for those firms' direct and indirect insiders. Moreover, the contracting firm could short direct and indirect competitors. It may, therefore, be difficult for contracting firms to police anti-trading provisions. On the other hand, the parties might address the enforcement problem by requiring disclosure and specifying large penalties for non-disclosure. Moreover, the least detectible trades – those by individuals and in firms other than the trading partner – also are least beneficial for the trading partner.

Assuming the parties could devise practicable anti-trading provisions, and assuming the law otherwise permits outsider trading in this situation, the question is why they would contract to permit their trading partners to capture some of the surplus from contracts through trading, or fail to contract to prevent such trading. The parties' objective in permitting this trading would seem to be to permit profit-sharing to reflect either ex ante uncertainty about potential contract gains or to provide incentives to maximize contract performance. But this raises the question of when or why the market work better than profit-sharing directly through the contract.

One reason for using a market is that the aggregate assessment of unbiased traders provides a quick and fairly accurate (depending on the market) measure of the value of the discounted present of the contract to the traded firm, both at the time it is entered into, and over time as performance progresses. By contrast, sharing via the contract must rely on current cash flow or profits to each party. This may not accurately measure the parties' overall gains from the contract, as where the contract opens up possibilities for other business. Also, over the course of performance, contingencies that the parties could not anticipate at the time of formation, such as supply or demand shocks for important commodities, may significantly shift the parties' gains and losses from the deal. These contingencies may not be fully reflected in the profit share, depending on the contract's accounting rules. For example, contract profits may depend on unit prices of items furnished by each party that are fixed or vary according to a formula, in either case out of sync with market fluctuations. Allowing outsider trading gives the other contracting party an ability to share in its trading partner's gains, no matter how unforeseeable those gains might have been at the time of the contract.

A problem with using profit-sharing through markets is that the share price of a large company traded in an efficient market may not be much affected by a single contract. This problem might be addressed by setting up a publicly traded tracking stock

¹⁴⁰ However, insiders in the traded firm probably would not be competing with outsiders for trading profits because the former are barred from trading by insider trading rules.

in the venture covered by the contract. Tracking stocks are a class of stock issued by a firm that is linked to the performance of a particular business unit.¹⁴¹ Diversified firms issue tracking or targeted stock for several reasons. First issuing tracking stock can increase the amount and depth of information on the performance of the firm and its individual business units. Gilson, et al. find increases in analyst coverage and decreases in both analyst earning forecast errors and the variance in individual analyst forecasts following spin-offs, equity carve outs, and tracking stock offerings.¹⁴² Improved information on performance can improve the performance of a firm's monitoring activities and sharpen its ability to give incentives to its units and their employees. In addition, when compared to spin-off transactions, the use of tracking stocks can yield tax advantages, preserve within firm synergies, and improve financial leverage.¹⁴³ However, the market for the tracking stock is likely to be thin and inefficient unless the contracted business is very large. Also, setting up the tracking stock involves significant transaction and legal costs.

A more likely explanation for why contracting firms might use profit-sharing through outsider trading is that it is more cost-effective than profit-sharing directly through the contract because the benefits to the outsider trader exceed the costs to the traded firm or its insiders. The main cost of significant outsider trading to the traded firm, assuming the outsider does not acquire control, is that the trading communicates information to the market, thereby preventing anyone else, including the traded firm, from capitalizing on the contract.¹⁴⁴ This is a cost to other traders only to the extent that it prevents them from capitalizing on the same information. Insider trading laws probably bar both the firm and its insiders from trading on advance knowledge of a material contract.¹⁴⁵ Other outsider shareholders would not have had access to these gains because they did not have advance knowledge of the contract. Nor did they have reason to expect to receive this information unless the outsider traders had a duty to disclose, which is the question to be decided. Regardless of who owns the traded firm's stock at any given time, the contract's favorable effect on the stock price reduces the firm's cost of capital and may bear on the insiders' incentive contracts.

An important aspect of this scenario is that it illustrates the basic difference between outsider buying as an incentive device and the outsider seller scenarios discussed above in this Part. Outsider buyers generally must get their information directly or indirectly from insiders or the firm. As a result, outsider buying does not usually reward search or production activities by the buyers themselves, but rather at least in part by the traded firm or its insiders. Moreover, insiders are likely to have some control over the trading. By contrast, outsider selling is more likely to reward search or activities by the

¹⁴¹ See Julia D'Souza & John Jacob, *Why Firms Issue Target Stock*, 56 J. FIN. ECON. 459 (2000).

¹⁴² Stuart C. Gilson, Paul M. Healy, Christopher F. Noe, & Krishna G. Palepu, *Analyst Specialization and Conglomerate Stock Breakups*, 39 J. ACCOUNTING RES. 565 (2001).

¹⁴³ D'Souza & Jacob, *supra* note 141, find statistically significant positive abnormal returns around the announcement of proposed tracking stock issuances.

¹⁴⁴ See Ronald Gilson & Reinier Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549 (1984).

¹⁴⁵ See *State Teachers Retirement Bd. v. Fluor Corp.*, 654 F.2d 843 (2d Cir. 1981).

traders, and involves discipline or monitoring of insiders.

III. ANALYZING ARGUMENTS FOR REGULATING OUTSIDER TRADING

As discussed in the Introduction, the regulation of trading on non-public information is now based generally on misappropriation, which is largely consistent with a property rights approach that allows firms to protect their information against misappropriation by illegal means. Apart from misappropriation, there is a general right to trade on “outside” information – i.e., information generated outside the company whose shares are traded. There are only isolated pockets of regulation of outsider trading based other than on misappropriate, particularly including takeover-related information,¹⁴⁶ Regulation FD, which regulates disclosures of information by firms to securities analysts,¹⁴⁷ and short sale regulation.¹⁴⁸ This Part focuses not on whether the current level of outsider liability is wrong, but on whether the outsider liability should be expanded.

The arguments for expanding the regulation of outsider trading are probably best presented by Ayres & Choi, who conclude that firms should be able to impose limits on trading of their stock beyond current law except in particular circumstances.¹⁴⁹ This Part discusses four basic arguments for regulating outsider trading. Subpart A discusses misappropriation, the current basis of outsider trading liability. Subpart B discusses the argument that allowing trading on unequal information increases trading costs and thereby reduces liquidity. Subpart C analyzes the theory that unlimited outsider trading may lead to excessive search by outsiders for information that has private, but little social value. Subpart D discusses the question of whether outsider trading should be restricted because it may provide perverse incentives to engage in specific types of wrongful acts. This Part considers whether the benefits of generally regulating outsider trading based on these theories are likely to outweigh the costs of reducing the incentives to engage in socially productive behavior.

A. PROTECTION AGAINST MISAPPROPRIATION

Current regulation of outsider trading focuses on whether it involves misappropriation of information. This regulation implicates the same considerations that justify protecting trade secrets.¹⁵⁰ In general, legally protecting trade secrets allows firms

¹⁴⁶ SEC Rule 14e-3.

¹⁴⁷ Selective Disclosure and Insider Trading, Exchange Act Release No 33-7881, 15 August 2000, 2000 WL 1201556.

¹⁴⁸ See SEC Rules 10a-1 and 10a-2 (prohibiting short sales at below a security's last reported price and related activities).

¹⁴⁹ See Ayres & Choi, *supra* note 10.

¹⁵⁰ A notable exception to this general rule is the holding in *E.I. DuPont de Nemours & Co. v. Christopher*, 431 F.2d 1012 (5th Cir. 1970), which held that the competitor's hiring a pilot to photograph a duPont plant under construction was not a proper means to discover a trade secret. Thus, the court protected the trade secret in the absence of an independent wrong. Landes & Posner note that this case is “strangely isolated.” Landes and Posner, *supra* note 29 at 355. They suggest that one interpretation is that the court merely enlarged the concept of trespass to cover this instance.

to economize on costly direct measures of protecting secrets.¹⁵¹ For example, if firms were not allowed to protect trade secrets through confidentiality or non-competition agreements with their employees, they would have to inefficiently limit the intra-firm flow of information.¹⁵² Legal protection channels those wishing to discover trade secrets toward less socially wasteful means of discovery. But expanding trade secret protection beyond cases of misappropriation to cases of accidental disclosure and reverse engineering would increase the avoidance costs of competitors and other users of information, particularly where there is no public source of information. It could also suppress socially productive uses of the information that flow from independent discovery or reverse engineering.¹⁵³

As with trade secrets, preventing the misappropriation of a firm's information by imposing liability on outsiders who trade with this information can reduce firms' need to devote resources to protecting their information. On the other hand, expanding a firm's property right in information would likely increase social costs. Under the current rule, those who are not insiders and have not misappropriated information are free to trade. This bright-line rule based on easily identifiable characteristics reduces the potential for over-deterrence.

In short, misappropriation-based liability recognizes the social value of rights in information. By contrast, a default rule that broadly prohibits outsider trading that does not involve misappropriation could suppress socially productive uses of information, especially those involving negative information about the firm, as outsiders would have to ensure that their trades were not based on material non-public information, and risk being sued whenever a trade is followed by a drop in the stock price.

B. INCREASED BID-ASK SPREADS

A common argument against trading on non-public information is that market makers and specialists will increase their bid-ask spreads when they expect to be trading with informed parties. This in turn makes trading more costly, and therefore reduces the amount of trading.¹⁵⁴ This argument seems to connect with the purpose of the securities laws to ensure investors' confidence in the securities markets. The argument has been mainly applied to justify liability under a misappropriation theory because misappropriating traders face relatively little competition for their information and so can trade gradually without affecting market prices.¹⁵⁵ The argument has not, however, been used to justify liability in non-misappropriation scenarios.

¹⁵¹ This may help explain *duPont*, discussed in *supra* note 150.

¹⁵² See, e.g., Robert Sherwood, INTELLECTUAL PROPERTY IN DEVELOPING COUNTRIES AND JUDICIAL SYSTEMS AND ECONOMIC DEVELOPMENT, Chapter 5 (1980) (noting such organizational inefficiencies in Brazilian firms).

¹⁵³ See Landes & Posner, *supra* note 29 at _.

¹⁵⁴ See Adam C. Pritchard, A.C. Pritchard, *United States v. O'Hagan: Agency Law and Justice Powell's Legacy for the Law of Insider Trading*, 78 B.U.L. Rev 13 (1998); Larry E. Ribstein, *Federalism and Insider Trading*, 6 SUP. CT. ECON REV. 123 (1998); Ayres & Choi, *supra* note 10 at _.

¹⁵⁵ See Nicholas L. Georgakopoulos, *Insider Trading as a Transactional Cost: A Market Microstructure Justification and Optimization of Insider Trading Regulation*, 26 CONN L REV 1 (1993).

There are several problems with the bid-ask spread argument, whether or not the conduct involves misappropriation.¹⁵⁶ First, even if informed trading generally increases trading costs, and even if this decreases uninformed trading,¹⁵⁷ it is not clear why this matters to social welfare. One possible argument is that trading even by uninformed outsiders adds to market efficiency.¹⁵⁸ However, this proposition is increasingly dubious as evidence mounts regarding the extent to which outsiders trade on noise rather than information.¹⁵⁹ A more serious problem with this argument is that any market efficiency benefits of increasing uninformed trading must be balanced against the reduced market efficiency of barring informed outsider trading. Pro-regulation theorists have argued that, at least in the non-misappropriation situation, where informed traders are not monopolists with regard to the information, the insiders must hide their trades, and therefore have no effect on market prices. But there is evidence that, notwithstanding this incentive, insiders *are* detected.¹⁶⁰ Moreover, whether or not informed *trading* contributes to market efficiency, the traders may engage in activities or produce information that contributes to social welfare by increasing market efficiency or firm discipline. In at least some of the scenarios discussed in Part I, the trading is on information that is produced as a byproduct of some other socially beneficial activity.

A second problem with the bid-ask-spread argument is that it is based on evidence of *insider* trading.¹⁶¹ There is a serious question whether it applies to trading by outsiders, even if the outsiders trade on misappropriated information. Bid-ask spreads depend on specialists' and market makers' expectation of dealing with informed traders. If trading by informed parties, such as the lawyer O'Hagan, is sporadic and unpredictable, it is not clear why or whether bid-ask spreads would increase. The argument would have to be that market professionals assume that much trading is information-based. Indeed, this would be a reasonable assumption, since the ECMH suggests that, other than behavioral biases, there is no other reason to make frequent portfolio adjustments. But on this theory, liability for informed trading would have to be much broader than anyone has suggested.¹⁶²

Third, even if there is a link between market efficiency and reduced liquidity because of increase in the bid-ask spread, the social benefits of any increased efficiency

¹⁵⁶ These problems are discussed in more detail in Ribstein, *supra* note 3.

¹⁵⁷ Note that the argument is not that uninformed traders decrease their securities ownership, but that they decrease the frequency of their portfolio adjustments.

¹⁵⁸ See Gilson & Kraakman, *supra* note 144 at 579-80.

¹⁵⁹ See Ribstein, *supra* note 48.

¹⁶⁰ See Lisa Meulbroek, *An Empirical Analysis of Illegal Insider Trading*, 47 J. FIN. 1661 (1992).

¹⁶¹ See Lawrence R. Glosten, *Insider Trading, Liquidity, and the Role of the Monopolist Specialist*, 62 J. BUS. 211 (1989); Lawrence R. Glosten & Lawrence E. Harris, *Estimating the Components of the Bid/Ask Spread*, 21 J. FIN. ECON. 123 (1988).

¹⁶² Ayres & Choi, *supra* note 10, rely on current default rules. They would allow individual firms to contract for limitations, but with many exceptions. As discussed below in Part IV, even these exceptions are probably not enough to ensure that the traded firms would internalize both costs and benefits of outsider trading.

from regulating outsider trading would have to be balanced against the social costs of reducing outsiders' incentives by preventing them from capitalizing on their information. This turns partly on the social benefits of increasing market efficiency. But in fact it is not clear the extent to which market efficiency improves resource allocation.¹⁶³ To be sure, this would also weaken somewhat the incentive argument against regulating informed outsider trading. But the argument based on outsiders' monitoring incentives would remain.

Fourth, even if outsider trading ought to be regulated in order to reduce trading costs and increase market liquidity, it is not clear the regulation needs to be at the federal level rather than by private contract or by the states.¹⁶⁴ The total investing costs of uninformed investors depend at least as much, if not more, on the potential for non-trading misconduct by insiders and others, which is basically regulated by state law. Federal law does no more than ensure that firms will disclose enough to enable investors to evaluate the potential for misconduct, which could apply equally to the risk of informed trading. Even without federal law, information owners could contract regarding use of their information, and traded firms could impose transfer restrictions on certain owners or types of owners.¹⁶⁵ To be sure, there are limits on firms' or information owners' ability or willingness to impose restrictions, and the potential that these parties may not fully internalize the costs and benefits of regulating outsider trading.¹⁶⁶ The question is whether broad federal regulation, or delegating regulatory-type powers to traded firms, achieves a better balance than the private market. We return to that question in Part V, after exploring the incentive implications of regulating outsider trading.

C. EXCESSIVE SEARCH

Ayres & Choi's argument for regulating outsider trading relies heavily on the notion that without this regulation traders will have incentives to engage in more search than is socially productive, resulting in a waste of resources. As Jack Hirshleifer discussed, investments in "foreknowledge" of information that will be eventually disclosed to the market by other means can have private, but little or no social, value. On the other hand, information search can be socially useful when it affects resource allocation decisions. This will be the case when the search involves "discovery" information that will not be known but for the information search.¹⁶⁷ Moreover, even investments in foreknowledge can have social value if accelerated public disclosure from public foreknowledge improves resource allocation. Although the amount of information search can be less than or greater than optimal, even a sub-optimal amount of search may

¹⁶³ See generally James Dow & Gary Gorton, *Stock Market Efficiency and Economic Efficiency: Is There a Connection*, 52 J FIN 1087 (1997); Lynn A. Stout, *The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation*, 87 MICH L REV 613 (1988).

¹⁶⁴ See Kimberly Krawiec, *Privatizing "Outsider Trading,"* 41 VA. J. INT'L. L. 693 (2001); Ribstein, *supra* note 154. State regulation can be viewed as contractual because of firms' ability to choose the incorporating state. See Ribstein, *supra* note 75.

¹⁶⁵ See Ayres & Choi, *supra* note 10.

¹⁶⁶ *Id.*

¹⁶⁷ See Hirshleifer, *supra* note 47.

result in higher social welfare than if speculative investments were outlawed.

If the foreknowledge is public, and in the case of investment in discovery information, even more search than is socially optimal may be preferable to a regime in which regulating outsider trading results in socially sub-optimal information search. Moreover, excessive search theoretically can be remedied through mandatory disclosure laws. Any outsider trading that exists despite mandatory disclosure is likely to encourage production of information that mandatory disclosure laws do not provide, and therefore arguably does not involve significant over-investment in search.

More importantly, the outsider trading scenarios emphasized in this article are not examples of information search, but rather of knowledge of events that the traders gain as a byproduct of their other activities, such as employment or contracting. Also, many of these scenarios involve sales on negative information that firms themselves may have little incentive to disclose, even assuming they are aware of the information. These considerations suggest that permitting profit from short sales will provide socially optimal incentives for disclosure.¹⁶⁸

D. INCENTIVES TO COMMIT BAD ACTS

Arguments for regulating outsider trading often focus on the perverse incentives such trading may create to engage in socially inefficient behavior. The overriding question is whether it is efficient to generally restrict outsider trading in order to reduce the level of such conduct. This argument will be discussed with respect to several specific categories of perverse conduct that allowing outsider trading arguably might encourage.

1. Sabotage

The ability to freely trade on non-public information can give traders incentives to engage in destructive acts by permitting them to trade on advance knowledge of the acts. Ayres & Bankman discuss the so-called “Atlas Shrugged” scenario in which a trader destroys his own company and profits by buying a competitor.¹⁶⁹ Hansen & Oprea discuss the possibility that allowing outsider trading will encourage sabotage.¹⁷⁰ For example, the saboteur might, as in the Tylenol or 9/11 situation, sell in advance of his own plan to cause devastating damage and repurchase after the event.¹⁷¹

¹⁶⁸ Richard Posner suggests a similar argument to Ayres & Choi might explain the criminal prohibition of blackmail in cases where the information that the blackmailer threatens to reveal is not about criminal or other unlawful activity. Under this theory, criminal prohibition of blackmail gives strong informational property rights to the possessor of negative information in order to prevent expenditures on detecting and concealing behavior that are inelastic with respect to the threat of blackmail. See Richard A. Posner, *The Economic Analysis of Law*, 6th ed. (2003) at 635-6. However, this explanation would not apply to behavior that did respond to the potential threat of blackmail.

¹⁶⁹ See Ayres & Bankman, *supra* note 11 at ___.

¹⁷⁰ See Hanson & Oprea, *supra* note 21.

¹⁷¹ Mark L. Mitchell, *The Impact of Drug Tampering on the Value of Firms: The 1982 Tylenol Poisonings and Subsequent Cases*, 27 *ECON, INQ.* 601 (1989).

Several considerations suggest that this is not a significant possibility. First, the damage from an individual event would have to be quite serious. Otherwise the saboteur could not be sure of trading profits for an individual event and would have to commit many such acts, thereby increasing the risks of detection. Yet major market-moving sabotage events are very difficult to execute successfully. Second, saboteurs may not have access to sufficient capital to earn enough on the market to compensate for the risk of criminal prosecution. They would need to be independently wealthy or have access to resources from lucrative criminal activity. Third, speculating on sabotage increases the risk of detection through the trading market.

Even if sabotage is a realistic risk of allowing outsider trading, this risk must be balanced against outsider trading's positive incentive effects discussed in Part I. Accordingly, the appropriate approach may be to allow outsider trading except in specific situations preventing a high risk of sabotage, in which case the trading may be banned or firms may be permitted to ban it. A more appropriate approach would be to directly punish the criminal act of sabotage, which may be easier if detection is aided by the criminal's reliance on trading profits to benefit from the crime.

2. Fraud and manipulation

A possible risk of allowing outsider trading is that the trader might plant a fraud, then trade, then capitalize on the difference. For example, in the Terayon case discussed above, the short seller might have disclosed false information about the company in an attempt to depress the stock price. Another example is the filing of a nuisance suit. However, given the market's capacity for self-correction, it is not clear how often these moves actually will artificially suppress stock price.¹⁷² This is much more feasible in small, relatively illiquid, markets, particularly where the misinformation is coming from outsiders. There are, of course, remedies for securities fraud and manipulation, whether by outsiders or insiders. It follows that if, as we argue, outsider trading is likely to be socially beneficial, it may be socially suboptimal to outlaw all such trading because of the risk of fraud.

3. Perverse management incentives

Arguments for regulating *insider* trading often focus on the perverse effects permitting such trading may have on the traders' conduct, and on the imprecision of any positive incentives. If managers could freely trade on information, they would have incentives to delay disclosure and to manage the company so that it produces volatile price movements that make insider trading profitable. Also, managers may be able to profit on information or efforts of others. Thus, even Manne recently backed away from the idea, echoing criticism of the idea that the wrong people will be compensated, the reward is not likely to match the contribution, and that any attempt to rectify these problems will involve the corporation in the sort of calculations insider trading as compensation is intended to avoid.¹⁷³

These criticisms of insider trading as compensation generally do not apply to outsider trading. For example, stock price fluctuation that is attributable to specific outsiders' actions, and therefore does not involve the problems of allocating credit that

¹⁷² See *supra* text accompanying note 128.

¹⁷³ *Id.*

exist in allocating rewards through insider trading to individuals in a large corporate hierarchy. Also, facts that outsiders cash in on are likely to relate to material events to which the outsiders have unique access. Thus, outsider trading may do a better job than insider trading of allocating the precise value of the event to the person who is responsible for creating it. And because outsiders lack power in the company, the ability to trade on non-public information cannot give them perverse incentives in running the corporation. And, in contrast to insider trading, corporations lack other ways to motivate outsiders.

Outsider trading may, however, perversely affect the conduct of traded *firms*, as distinguished from outsiders. These scenarios assume that the agents who are engaging in the conduct on behalf of the firms are doing so in the interests of the firms' owners. For example, trading by outsiders may force firms to make inopportune disclosures. However, even if this is a general argument for regulating outsider trading, it does not apply to most of the situations in Part I (with the exception of the contract scenario), which involve negative information that firms usually have little incentive to disclose, and may not even be aware of.

IV. BALANCING THE CONSIDERATIONS

The discussion in this article shows that there are many situations in which barring informed outsider trading could deter socially productive conduct. This suggests that a broad bar on such trading would be inefficient. This Part considers the efficiency of more narrowly circumscribed restrictions on outsider trading, focusing on the Ayres-Choi proposal assigning to the firm the right to prohibit outsider trading.

Ayres & Choi argue that the firm is in the best position to internalize the costs and benefits of outsider trading. A problem with this argument is that most of the outsider trading examples discussed in Part I involve negative information that the firm's managers have incentives to keep from the market. Indeed, outsider sales are potentially desirable precisely because of their effect in disciplining insiders. This suggests that empowering the firm to block disclosure may lead to suboptimal results, as outsider trading may have social value even in situations in which the traded firm's agents have perverse incentives to prohibit it.

Mandatory disclosure might substitute to some extent for outsider search to accelerate the disclosure of foreknowledge.¹⁷⁴ However, mandatory disclosure may not fill all of the information gaps where firms with self-interested agents can prohibit outsider trading. Moreover, over-inclusive mandatory disclosure rules have their own negative effects, including suppressing the incentives of the traded firm to produce and preserve negative information.¹⁷⁵

These considerations suggest at least that firms should not be able to bar outsider trading in some specific situations in which firms or their insiders may have perverse incentives to inhibit monitoring and discipline. The question is whether specific exceptions feasibly can balance the costs of Type I and Type II errors. Managers

¹⁷⁴ Ayres & Choi, *supra* note 10 at _.

¹⁷⁵ See Ronald J. Allen, et al., *A Positive Theory of the Attorney-Client Privilege and the Work Product Doctrine*, 19 J. LEG. STUD. 359 (1990) (theorizing that attorney-client and work product privileges encourage disclosure of negative information).

arguably would have selfish incentives to bar informed outsider *selling*, particularly including short-selling. This can be seen from evidence that managers delay the disclosure of bad news.¹⁷⁶ Permitting informed outsider selling gives outsiders incentives to find and ultimately disclose negative information that managers would rather keep hidden. On the other hand, much informed outsider selling would not threaten managers in any way, and some may be connected with conduct that harms the firm.

The problems of managers' self-interest regarding outsider trading might be addressed by delegating to the shareholders the power to decide on outsider trading prohibitions. An argument against this approach is that passive shareholders of publicly traded corporations might be expected to accept any manager-proposed opt-in or opt-out regarding outsider trading without expending significant efforts to analyze the proposal.

Firms might be permitted to generally to bar outsider *buying*. Since buying is not as likely as informed outsider selling to expose managerial wrongdoing, insiders ordinarily would not have selfish incentives to bar this trading. Ayres & Choi argue for specific rules protecting takeover-related trading, which managers would have selfish incentives to bar.¹⁷⁷ However, the distinction between outsider buying and selling is not as clear as it might seem. In most situations in which outsider selling on negative information is prohibited, the trader might achieve similar effects by buying the stock of a firm that would be helped by the same or related information, including a takeover target or competitor.

Allowing the firm to decide on regulation of outsider trading in its shares also may involve a conflict of interest between the firm's managers, who will effectively make the decision, and its owners. The managers are likely to have more information than most outsiders, and therefore an interest in restricting competition regarding use of the information. Ayres & Choi respond to this point by noting that managers are barred from trading by insider trading laws.¹⁷⁸ But insider trading laws only bar use of material information, possibly including the large contracts discussed in subpart I.F. This leaves managers free to capitalize on specific developments that may not be individually material and non-public but as to which insiders' general knowledge of the firm gives them a trading edge. Although barring informed outsider buying does not present as much problem as barring informed outsider selling, this trading also rarely causes harm. This suggests restrictive rules are likelier to cause net social harm than liberal rules.

To be sure, any negative effects of prohibiting outsider trading may be capitalized in the price of the stock. This suggests that firms might be permitted to choose whether to enable regulation of outsider trading. However, ex ante value of the effects of outsider trading, even if significant across the economy, are unlikely to be sufficient for individual firms to generate strong incentives for managerial behavior in this regard. That is particularly the case since the managers can rationalize a decision to accept outsider trading regulation on the sort of "fairness" grounds that regulators, including the SEC, have emphasized as acceptable. Although this means that firms will internalize the effects of outsider trading through their cost of capital, the same could be said of most

¹⁷⁶ See S.P. Kothari, Susan Shu & Peter D. Wysocki, *Do Managers Withhold Bad News?*, http://papers.ssrn.com/paper.taf?abstract_id=803865 (September 2005).

¹⁷⁷ See Ayres & Choi, *supra* note 10 at ___.

¹⁷⁸ See *id.* at 369, n. 191.

regulation, including the securities laws. Thus, the internalization argument cannot be the basis of determining the scope of regulating outsider trading.

Thus, it is not clear which categories of informed outside selling firms should be allowed to bar. The answer depends on whether informed outside selling is likely to be harmful. As discussed above in subpart II.D., the harm is mostly associated with particular types of conduct, such as sabotage, rather than generally with outsider trading. It follows that firms should not be able to create an SEC-enforced rule against outsider selling, which of course would include all but the first of the categories discussed in Part II.

It is important to keep in mind that we do not oppose contracting within the firm regarding either outsider buying or outsider selling. The question is whether the firms should be able to create or limit federal penalties for violation of the insider trading laws. Firms could employ standard contract enforcement mechanisms to restricted transfer, including damage remedies and invalidating the transfer. However, as discussed above in this part, the potential costs from informed outsider trading do not justify applying a federal remedy, whether or not those costs are internalized in the firm through Ayres & Choi's proposed rule.

In general, given the perverse incentives of traded firms' agents to bar outsider trading in many situations in which the trading could incentivize socially productive behavior, it is unlikely that delegating blocking power to the traded firm is the appropriate internalizing mechanism. The best solution may be the current rule based on misappropriation, as long as it is clear that this remedy is subject to the rights of information-owners to permit use of the information.

V. CONCLUDING REMARKS

Outsider trading has been the focus of significant recent attention in several different scenarios, ranging from takeovers to boycotts. In all cases, the attention has been negative, and has signaled the possibility of regulation. This article shows that any such regulation should take account of the potential social benefits of outsider trading as a way to encourage the information discovery and monitoring that lies outside traditional mechanisms for protecting intellectual property. In light of these social benefits, the potential costs of outsider trading, particularly in terms of creating perverse incentives to engage in socially costly behavior, are better addressed through regulation of specific behavior than by generally reducing the incentives created by outsider trading.