

Fordham Law School

FLASH: The Fordham Law Archive of Scholarship and History

Faculty Scholarship

1993

\$850,000 in Six Minutes-The Mechanics of Securities Manipulation

Steve Thel

Fordham University School of Law, sthel@law.fordham.edu

Follow this and additional works at: http://ir.lawnet.fordham.edu/faculty_scholarship



Part of the [Securities Law Commons](#)

Recommended Citation

Steve Thel, *\$850,000 in Six Minutes-The Mechanics of Securities Manipulation*, 79 *Cornell L. Rev.* 219 (1993-1994)

Available at: http://ir.lawnet.fordham.edu/faculty_scholarship/678

This Article is brought to you for free and open access by FLASH: The Fordham Law Archive of Scholarship and History. It has been accepted for inclusion in Faculty Scholarship by an authorized administrator of FLASH: The Fordham Law Archive of Scholarship and History. For more information, please contact tmelnick@law.fordham.edu.

\$850,000 IN SIX MINUTES—THE MECHANICS OF SECURITIES MANIPULATION

Steve Thel†

TABLE OF CONTENTS

INTRODUCTION	219
I. MANIPULATING PRICES WITH TRADES	224
A. Trades Sometimes Change Price	224
B. Using Trades to Change Price	227
1. <i>Disparate Valuation</i>	228
2. <i>Immediacy</i>	232
3. <i>Altered Expectations</i>	240
II. PROFITING FROM MANIPULATED PRICES	247
A. Contracts	248
B. Offsetting Trades	262
III. RESPONDING TO MANIPULATION	280
A. Private Responses	281
1. <i>Contractual Precautions</i>	281
2. <i>Trader Reactions</i>	285
3. <i>Market Reform</i>	286
B. Legal Intervention	288
1. <i>Objective Rules</i>	288
2. <i>Intentional Manipulation</i>	292
CONCLUSION	298

INTRODUCTION

The Securities Exchange Act of 1934¹ declares that securities prices are susceptible to manipulation² and that manipulation precipitates, intensifies and prolongs national emergencies like the depression that followed the stock market crash of 1929.³ The Exchange Act addresses the problem by forbidding a variety of trading practices that

† Professor, Fordham University School of Law.

I would like to thank Mark Bagnoli, Victor Brudney, Roberto Finzi, Jill Fisch, George Hay, Tom Hazen, Ed Kitch, Don Langevoort, Louis Loss, Norman Poser, Dan Richman, Stewart Schwab, Alan Schwartz, Todd Sullivan, Patricia Thel and Bill Williams for their help with this Article.

¹ Pub. L. No. 73-291, 48 Stat. 881 (codified as amended at 15 U.S.C. §§ 78a-78ll (1988)) [hereinafter Exchange Act].

² 15 U.S.C. § 78b(3) (1988).

³ 15 U.S.C. § 78b(4) (1988).

it labels manipulative⁴ and subjecting others to regulation.⁵ It also gives the Securities and Exchange Commission plenary authority to regulate the use of "any manipulative or deceptive device or contrivance" in connection with securities transactions.⁶ These laws were designed to prevent securities manipulation.⁷

Daniel R. Fischel and David J. Ross recently offered a provocative reexamination of the subject of manipulation.⁸ Although Fischel and Ross begin their article with the observation that "[m]uch of the regulation of financial markets seeks to prevent manipulation,"⁹ their purpose is not to show how the law might achieve this goal. On the contrary, their position is that manipulation is not really a problem at all. After offering what they call the first "principled analysis of the concept of manipulation,"¹⁰ Fischel and Ross argue that the law's efforts to prevent manipulation are misguided. They conclude that "the concept of manipulation should be abandoned altogether. . . . Actual trades should not be prohibited as manipulative regardless of the intent of the trader."¹¹

As Fischel and Ross see it, there is no reason to prohibit manipulative trading because there is nothing to prohibit. They maintain that people would not engage in manipulative trading even if it were legal, because it is so difficult to profit by manipulating security prices with trades. "Profitable (successful) manipulations," they assert, "require two conditions: first, trading must cause the price of the relevant security to rise; and second, the manipulator must be able to sell

⁴ 15 U.S.C. § 78i(a)(1)-(5) (1988).

⁵ 15 U.S.C. §§ 78i(a)(6), (b), 78j(a) (1988).

⁶ 15 U.S.C. § 78j(b) (1988). The Exchange Act directly forbids manipulation in particular contexts. The Act forbids brokers and dealers to use manipulative devices and contrivances in the over-the-counter market, and charges the SEC with defining such devices and contrivances as are manipulative. *Id.* § 78o(c)(1)-(2). The Act also prohibits any person from engaging in manipulative acts or practices in connection with a tender offer, and charges the SEC with defining and prescribing means reasonably designed to prevent manipulative acts and practices. *Id.* § 78n(e). The organized securities markets also have rules against manipulation. *See, e.g.*, 2 Am. Stock Ex. Guide (CCH) ¶ 9224 (Nov. 1989) (prohibiting trades for the purpose of influencing market price); Nat'l Ass'n Sec. Dealers Manual (CCH) ¶¶ 2155, 2168 (Sept. 1, 1976) (prohibiting manipulative quotations and the use of manipulative devices in connection with transactions); 2 N.Y.S.E. Guide (CCH) ¶ 2435 (May 1990) (prohibiting the effecting of trades for the purpose of improperly influencing the market); *see also id.* ¶¶ 2342.21, 2351(e) (Nov. 1992) (requiring members to review trades).

⁷ *Basic Inc. v. Levinson*, 485 U.S. 224, 230 (1988); *see* Steve Thel, *The Original Conception of Section 10(b) of the Securities Exchange Act*, 42 STAN. L. REV. 385 (1990).

⁸ Daniel R. Fischel & David J. Ross, *Should the Law Prohibit "Manipulation" in Financial Markets?*, 105 HARV. L. REV. 503 (1991); *see also* Junda Woo, *Law Theorists Call Stock Manipulation a Vague Concept, Seek to Abolish Term*, WALL ST. J., Mar. 6, 1992, at B4A (recording reaction to the Fischel & Ross article).

⁹ Fischel & Ross, *supra* note 8, at 503.

¹⁰ *Id.* at 506.

¹¹ *Id.* at 507, 553.

at a price higher than the price at which the manipulator purchased."¹² Unfortunately for the would-be manipulator, purchases seldom move prices up, and if they do, it is difficult to effect sales at the inflated price. Accordingly, manipulative schemes are unlikely to be successful. Given the fact that trading is costly, Fischel and Ross argue that people will not even try to manipulate security prices.¹³

Fischel and Ross also argue that prohibiting manipulative trades results in significant social costs.¹⁴ Because manipulative intent is hard to identify, a rule prohibiting manipulative trades is expensive to administer and deters some appropriate trading. They conclude that, on balance, such a rule is unwise because significant social costs outweigh any minimal benefits that the rule might yield.¹⁵ Fischel and Ross are less hostile toward rules against the classic manipulative devices of wash sales and matched trades, but they insist that such transactions be analyzed as a form of fraud.¹⁶

This Article shows that manipulation is not self-detering. Manipulators can move prices by trading and can profit by doing so.¹⁷ Fischel and Ross base their analysis of the relationship between prices and trading on empirical research into the impact of securities trading on prices in the organized securities markets, particularly the New York Stock Exchange. This literature offers important insights into the effect that trading has on prices. Inasmuch as it shows that many trades do not change prices and that those trades that do change prices usually do not change them much, it suggests that manipulation may be quite difficult. Nevertheless, studies consistently show that some trades occasion price changes. Manipulators can profit from very small, short-lived price changes, and the evidence in the economic literature in fact indicates that manipulation is easier to accomplish than Fischel and Ross admit.

¹² *Id.* at 512.

¹³ *Id.* at 512-19.

¹⁴ *Id.* at 522-23.

¹⁵ *Id.* at 522-23.

¹⁶ *Id.* at 507, 510-12.

¹⁷ When used in this Article, unless the context otherwise requires, the word "manipulation" means buying a security for the purpose of increasing the reported price or selling a security for the purpose of decreasing the reported price. I think that Fischel and Ross use the word in a similar way, although they discuss the definition at length. Fischel & Ross, *supra* note 8, at 507-10. See also *id.* at 510-12 (comparing manipulation with fraud); Richard D. Friedman, *Stalking the Squeeze: Understanding Commodities Market Manipulation*, 89 MICH. L. REV. 30 (1990) (discussing the concept of manipulation in commodities regulation); Thel, *supra* note 7, at 461-64 (discussing the scope of the SEC's authority to regulate manipulative devices); Steve Thel, *Regulation of Manipulation Under Section 10(b): Security Prices and the Text of the Securities Exchange Act of 1934*, 1988 COLUM. BUS. L. REV. 359, 377-88 (discussing the meaning of "manipulative" in section 10(b) of the Securities Exchange Act).

More importantly, this evidence is only of limited relevance to the question of whether manipulators can change prices with trades. Market prices are the record of the transactions of profit-maximizing traders. The vast majority of traders (virtually all traders, according to Fischel and Ross) want to trade at the best price possible, that is, to buy low and sell high. These traders want to minimize the effect of their trading on price, and they support a variety of institutions that minimize the impact that trading might otherwise have on price.¹⁸ Reported market prices are dominated by the trades of people trying to avoid moving prices. Because manipulators try to do just the opposite, findings based on reported prices cannot be extrapolated to their trading.

A substantial body of recent literature in the field of finance focuses directly on the subject of manipulative trading, much of it drawing explicitly or implicitly on game theory.¹⁹ The models developed in this work indicate that manipulation is possible, with some authors even suggesting that it may be common. Nonetheless, the only way to determine whether manipulation actually occurs may be to study actual cases. Yet, trades designed to move prices are presumably relatively rare, and they are certainly hard to identify. Traders who want

¹⁸ Fischel and Ross sketch a market in which prices are spontaneous and the services of the market are provided free to all who trade. However, markets are costly and trading services are not provided automatically. See J. Harold Mulherin et al., *Prices are Property: The Organization of Financial Exchanges From a Transaction Cost Perspective*, 34 J.L. & ECON. 591 (1991) (developing the thesis that the product of financial exchanges is prices and that the function of exchanges is to establish property rights in price quotations); see also ROBERT A. SCHWARTZ, EQUITY MARKETS: STRUCTURE, TRADING, AND PERFORMANCE 514-29 (1988) (discussing the price discovery process); Jonathan Macey & Hideki Kanda, *The Stock Exchange as a Firm: The Emergence of Close Substitutes for the New York and Tokyo Stock Exchanges*, 75 CORNELL L. REV. 1007 (1990) (discussing "listings" as the primary product of competitive exchanges); David E. Van Zandt, *The Market as a Property Institution: Rules for the Trading of Financial Assets*, 32 B.C.L. REV. 967 (1991) (explaining the market as a property-based system).

¹⁹ See Franklin Allen & Douglas Gale, *Stock-Price Manipulation*, 5 REV. FIN. STUD. 503 (1992); Franklin Allen & Gary Gorton, *Stock Price Manipulation, Market Microstructure and Asymmetric Information*, 36 EUR. ECON. REV. 624 (1992); Bruno Gerard & Vikram Nanda, *Trading and Manipulation around Seasoned Equity Offerings*, 48 J. FIN. 213 (1993); Robert A. Jartow, *Market Manipulation, Bubbles, Corners, and Short Squeezes*, 27 J. FIN. & QUANTITATIVE ANALYSIS 311 (1992); Praveen Kumar & Duane J. Seppi, *Futures Manipulation with "Cash Settlement"*, 47 J. FIN. 1485 (1992); Robert A. Wood, *Survival Strategies for Exchanges*, in THE CHALLENGE OF INFORMATION TECHNOLOGY FOR THE SECURITIES MARKETS 140 (Henry C. Lucas, Jr. & Robert A. Schwartz eds., 1989) [hereinafter INFORMATION TECHNOLOGY]; MARK BAGNOLI & BARTON L. LIPMAN, STOCK PRICE MANIPULATION THROUGH TAKEOVER BIDS (Indiana University Department of Finance Working Paper, 1992) (on file with author); Kathleen Weiss Hanley et al., *Price Stabilization in the Market for New Issues*, 34 J. FIN. ECON. 177 (1993); Judith S. Ruud, *Underwriter Price Support and the IPO Underpricing Puzzle*, 34 J. FIN. ECON. 135 (1993); see also Jean-Luc Vila, *Simple Games of Market Manipulation*, 29 ECON. LETTERS 21 (1989) (presenting two games of market manipulation relevant to financial economics). For an extended discussion of manipulation in the futures markets, see THE INDUSTRIAL ORGANIZATION OF FUTURES MARKETS (Ronald W. Anderson ed., 1984).

to move prices are likely to keep their intentions secret, both because prices may not move if their intentions are known and because trading with the intention of moving prices may be illegal.²⁰ Accordingly, the study of actual manipulative trading may be unavoidably anecdotal. Many of the players are notorious and their stories fascinating, however, so this may not be all for the bad. For example, when John Mulheren bought 75,000 shares of the common stock of Gulf & Western Industries in six minutes on October 17, 1985, in response to a telephone call from Ivan Boesky, Boesky earned an extra \$850,000 on the resulting twenty-five percent rise in the stock's price.²¹ Manipulation is theoretically possible, and it probably occurs fairly often.

If manipulation can be profitable, it cannot be ignored on the theory that it is self-detering. Nevertheless, the law should not pursue manipulators unless doing so will actually do some good. As Fischel and Ross emphasize, manipulative intent is often hard to identify, and the possibility of erroneous prosecution may discourage appropriate trading. Moreover, even an effective rule against intentional manipulation would be an incomplete solution to the underlying problem, because price-affecting trades may cause damage regardless of the reason that those trades are undertaken.

These difficulties suggest that the law should respond carefully to manipulative trading. The sponsors of the Exchange Act understood this. They recognized that securities-market practices change quickly and that the process of price formation is not fully understood. Faced with what they knew was a complicated problem, they concluded that the law should be carefully calibrated to eliminate destructive practices without unduly interfering with appropriate trading, and that the law should develop as market practices change and understanding of

²⁰ It may sometimes be possible to document the extent of manipulative trading indirectly without studying particular cases of manipulation. For example, several recent studies have explored the extent and effect of underwriter price stabilization in connection with initial public offerings by analyzing market data. See Hanley et al., *supra* note 19; Ruud, *supra* note 19. Firms are sometimes said to repurchase their stock in order to increase its price, and these trades are typically disclosed. Issuer repurchases may not be analogous to the manipulative trading considered here, however. While opportunities for manipulation may exist in this context, the matter might better be analyzed as fraud. The price effect of repurchases may come not from the trades, but from the information conveyed by the fact that the issuer is buying, and this information is typically conveyed by the explicit announcement that the issuer is repurchasing. See Theo Vermaelen, *Common Stock Repurchases and Market Signalling*, 9 J. FIN. ECON. 139 (1981); cf. Richard A. Booth, *Discounts and Other Mysteries of Corporate Finance*, 79 CAL. L. REV. 1053, 1087-91, 1114-16 (1991) (rejecting the signalling explanation of price impact of issuer repurchases in favor of elastic demand, and thus concluding that repurchases are not manipulative).

²¹ See *United States v. Mulheren*, 938 F.2d 364, 366-68 (2d Cir. 1991); see also *infra* notes 155-74 and accompanying text. The allegations against Mulheren were litigated, and Boesky, who pleaded guilty to his own crimes, testified at Mulheren's trial. Mulheren did not deny receiving the call or trading. Rather, the primary issue was whether Mulheren was a willing conspirator or whether Boesky had manipulated him as well as the market.

the market grows. Instead of broadly prohibiting securities manipulation, the Exchange Act charges regulators with studying the problem and adopting appropriate rules in response.

I

MANIPULATING PRICES WITH TRADES

A. Trades Sometimes Change Price

Securities are often traded without any apparent effect on market prices, and trades affect security prices much less than most people probably think they do.²² The vast majority of trades on the New York Stock Exchange, for example, take place at or near the same price as the previous trade,²³ and even relatively large trades are often effected at prevailing prices.²⁴ In considering the issue of manipulative trading, it is important to recognize that trades do not automatically change price. Fischel and Ross are probably right when they suggest that many legal commentators and institutions have underestimated the difficulty of manipulating price with trades.²⁵

One might assume that entering the market to buy a security increases the demand for the security and thus tends to increase its price. One might also assume that entering the market to sell increases supply and thus tends to depress price. Purchases and sales are supposed to change price because they must be made with people who will sell only at a premium or buy only at a discount.²⁶ The nature of securities is such, however, that the relationship between trading and security prices is more attenuated than conventional wisdom suggests.

For many market participants, a security is simply the right to a stream of income. These people view different securities as substitutes for each other, especially within a diversified portfolio, and they are willing to replace one security with another without insisting on a premium.²⁷ It follows that "the supply of near-perfect substi-

²² Cf. RICHARD A. BREALEY & STEWART C. MYERS, *PRINCIPLES OF CORPORATE FINANCE* 307-08 (4th ed. 1991) (criticizing the common belief that new stock can be sold only at substantial discounts).

²³ NEW YORK STOCK EXCHANGE, *NYSE FACT BOOK* 22 (Ellen Duttweiler ed., 1990) ("In 1989, 95.9% of all transactions occurred with no change or a 1/8 point variation.") [hereinafter *NYSE FACT BOOK*].

²⁴ See *id.* at 22 (In 1989, "the average stock showed no change or 1/8 point change in 3,000 shares of volume 87.1% of the time.").

²⁵ See Fischel & Ross, *supra* note 8, at 512-19.

²⁶ See Booth, *supra* note 20, at 1071.

²⁷ See BREALEY & MYERS, *supra* note 22, at 131-49, 307-08; JAMES H. LORIE ET AL., *THE STOCK MARKET: THEORIES AND EVIDENCE* 108-31 (2d ed. 1985); JAMES C. VAN HORNE, *FINANCIAL MANAGEMENT AND POLICY* 55-76 (7th ed. 1986); Booth, *supra* note 20, at 1077-79; Fischel & Ross, *supra* note 8, at 513-14; Lynn A. Stout, *Are Takeover Premiums Really Premiums? Market Price, Fair Value, and Corporate Law*, 99 *YALE L.J.* 1235, 1241-43 (1990).

tutes for any particular security is likely to be much larger than the supply of the security itself,"²⁸ and because substitutes are available, "theoretically, trading need not have any effect on securities prices."²⁹

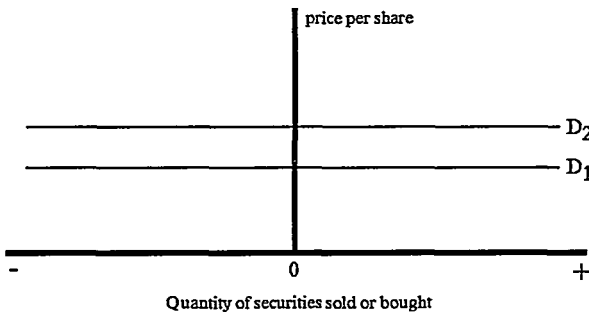
The fact that very large quantities of securities are regularly bought and sold at prevailing market prices might seem to suggest that trades do not affect price at all. If trading did not influence prices, manipulation by trading would be impossible.³⁰ However not all trades are effected at prevailing prices, and trading and price changes are connected.³¹

²⁸ Fischel & Ross, *supra* note 8, at 514.

²⁹ *Id.*; see BREALEY & MYERS, *supra* note 22, at 307-08; Paul Asquith & David W. Mullins, Jr., *Equity Issues and Offering Dilution*, 15 J. FIN. ECON. 61, 62 (1986); William J. Carney, *Shareholder Coordination Costs, Shark Repellents, and Takeout Mergers: The Case Against Fiduciary Duties*, 1983 AM. B. FOUND. RES. J. 341, 355-57; Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 629-30 (1984); Lawrence Harris & Eitan Gurel, *Price and Volume Effects Associated with Changes in the S&P 500 List: New Evidence for the Existence of Price Pressures*, 41 J. FIN. 815, 815 (1986); Alan Kraus & Hans R. Stoll, *Price Impacts of Block Trading on the New York Stock Exchange*, 27 J. FIN. 569, 569-70 (1972); Stout, *supra* note 27, at 1238 n.24, 1241-42.

The figure below illustrates situations in which any trade can be made at the prevailing price.

FIGURE 1: PERFECTLY ELASTIC EXCESS DEMAND FUNCTIONS



If investors will buy or sell any amount of a security at a certain price, the net demand for that security can be illustrated by a horizontal line intersecting the price axis at that price. The lines labeled D₁ and D₂ each represent such an excess demand function, with a higher market price for the security whose excess demand is represented by line D₂. All trades will occur at the market price, and trades will not move price merely because of their size, because investors can buy or sell an unlimited quantity of the security at the market price.

³⁰ Fischel & Ross, *supra* note 8, at 517.

³¹ Many commentators attribute the stock market break of October 1987 at least in part to the concerted selling of institutional investors, especially those engaged in program trading or following reactive portfolio insurance plans. See, e.g., REPORT OF THE PRESIDENTIAL TASK FORCE ON MARKET MECHANISMS at v, 29 (Jan. 1988); DIVISION OF MARKET REGULATION, SECURITIES AND EXCHANGE COMMISSION, REPORT ON THE OCTOBER 1987 MARKET BREAK at xiii (Feb. 1988) (with changes in investor perceptions regarding such fundamentals "as the 'trigger,' institutional stock selling was the largest single direct factor responsible for the initial opening declines on October 19. Finally, panic selling . . . was primarily responsible for the free-fall decline."). See generally Jonathan R. Macey et al., *Restrictions on Short Sales: An Analysis of the Uptick Rule and its Role in View of the October 1987 Stock Market Crash*, 74 CORNELL L. REV. 799, 822-32 (1989) (discussing the effects of program trading

At the extreme, a substantial premium over market price must typically be paid to buy enough stock to acquire control of a publicly held company.³² This is the case whether the buyer acquires control from a large holder in a single purchase³³ or from dispersed shareholders through a tender offer.³⁴ Similarly, when issuers repurchase their stock, the more they buy, the higher the price they pay.³⁵ Conversely, prices typically decline when issuers or substantial holders sell large quantities of securities.³⁶

Large transactions effected in the normal course of trading may affect price as well, with seller-initiated trades depressing price and buyer-initiated trades increasing it.³⁷ About one-half of very large trades effected on the New York Stock Exchange (NYSE) are reported to occur at a price different from the previously prevailing price, and

and the contemporary response). The impact that large trades have on prices also underlies the controversy over front-running, that is, the practice of trading a security while aware of an impending large trade in the same or a related security, with a view toward profiting from the price change occasioned by the large trade. See Jerry W. Markham, "Front-Running"—Insider Trading under the Commodity Exchange Act, 38 CATH. U. L. REV. 69 (1988); see also David P. Doherty et al., *The New York Stock Exchange and Regulation of Market Manipulation*, in MARKET MANIPULATION 141 (Theodore A. Levine & Joseph I. Goldstein eds., 1989); Ralph C. Ferrara et al., *Protecting the Market—An Overview of Regulatory Efforts to Combat Market Manipulation on the Stock Exchanges*, in MARKET MANIPULATION, id. at 94, 118-24; Mahlon M. Frankhauser & David S. Frye, *Front Running*, 21 REV. SEC. & COMMODITIES REG. 179 (1988); Mark S. Howard, *Frontrunning in the Marketplace: A Regulatory Dilemma*, 19 SEC. REG. L.J. 263 (1991); Thomas A. Russo & Susan J. Lobel, *Frontrunning and Block Trading*, 23 REV. SEC. & COMMODITIES REG. 75 (1990).

³² See Michael C. Jensen & Richard S. Ruback, *The Market for Corporate Control: The Scientific Evidence*, 11 J. FIN. ECON. 5 (1983); Reinier Kraakman, *Taking Discounts Seriously: The Implications of "Discounted" Share Prices as an Acquisition Motive*, 88 COLUM. L. REV. 891, 908 (1988); Richard Roll, *Empirical Evidence on Takeover Activity and Shareholder Wealth*, in KNIGHTS, RAIDERS, AND TARGETS 241 (John C. Coffee, Jr. et al. eds., 1988).

³³ See Michael J. Barclay & Clifford G. Holderness, *The Law and Large-Block Trades*, 35 J.L. & ECON. 265 (1992).

³⁴ Ellen B. Magenheimer & Dennis C. Mueller, *Are Acquiring-Firm Shareholders Better Off After an Acquisition?*, in KNIGHTS, RAIDERS, AND TARGETS, *supra* note 32, at 171, 188.

³⁵ See Laurie Simon Bagwell, *Dutch Auction Repurchases: An Analysis of Shareholder Heterogeneity*, 47 J. FIN. 71 (1992) [hereinafter Bagwell, *Dutch Auctions*]; Laurie Simon Bagwell, *Shareholder Heterogeneity: Evidence and Implications*, 81 AM. ECON. REV. 218 (1991) [hereinafter Bagwell, *Heterogeneity*].

³⁶ See Asquith & Mullins, *supra* note 29; Kraus & Stoll, *supra* note 29; Wayne H. Mikkelson & M. Megan Partch, *Stock Price Effects and Costs of Secondary Distributions*, 14 J. FIN. ECON. 165 (1985); John E. Parsons & Artur Raviv, *Underpricing of Seasoned Issues*, 14 J. FIN. ECON. 377, 381-92 (1985); Myron S. Scholes, *The Market for Securities: Substitution Versus Price Pressure and the Effects of Information on Share Prices*, 45 J. BUS. 179 (1972).

³⁷ See Robert W. Holthausen et al., *The Effect of Large Block Transactions on Security Prices*, 19 J. FIN. ECON. 237 (1987); NYSE FACT BOOK, *supra* note 23, at 22 (noting that, in 1989, the average stock moved more than 1/8 point on 3000 shares of volume about 13% of the time); Kraus & Stoll, *supra* note 29. For particular examples, see *infra* notes 141-62, 235-47 and accompanying text; cf. Stout, *supra* note 27, at 1254-55 (discussing how index funds buy substantial amounts of stocks included in the S&P 500 Index, and noting that when a stock is added to the index, its price typically increases).

the larger the trade, the more likely price will change.³⁸ Moreover, due to rules on the priority of orders, the record of completed trades understates the frequency with which large trades actually change price.³⁹ Finally, prices are volatile, and much of this volatility is related to trading. Prices change as market makers and other market participants respond to orders entering the market.⁴⁰

B. Using Trades to Change Price

In sum, trades sometimes change prices. Economists disagree about the reasons that trades influence price, but broadly speaking they offer three explanations.⁴¹ A trade may affect the price of a security because market participants disagree about the value of the traded security; because offsetting trading interest may be temporarily absent from the market when the trade is effected; or because the trade communicates information about the value of the security.

So long as trades can change reported price, manipulation may be possible regardless of what causes the price change. Although a manipulator need not understand why prices change, it may be difficult to construct legal responses to manipulation without understanding the process by which trades influence prices.⁴² Unfortunately, the discord among economists will not be resolved easily, inasmuch as the price effects attending particular trading practices are consistent with

³⁸ Holthausen et al., *supra* note 37, at 244-47; Kraus & Stoll, *supra* note 29, at 582-83; cf. Joel Hasbrouck, *Measuring the Information Content of Stock Trades*, 46 J. FIN. 179, 199-200 (1991) (noting that trades in smaller issuers have greater impact on price than trades in larger issues).

³⁹ NYSE rules generally require that, before a block trade is executed, all limit orders between the previous price and the block price, and all earlier-entered orders at the block price, must be satisfied. See 2 NYSE Guide (CCH) ¶ 2127; see also 5 LOUIS LOSS & JOEL SELIGMAN, *SECURITIES REGULATION* 2575 n.265 (3d ed. 1990). The exchange member handling the block trade satisfies these public orders when the block trade is executed. If the last public order effected is executed at the block price, the tape will show that the block traded at the prevailing price even though the block traded at a price different from that prevailing at the time that the block came to the floor (which different price presumably would have continued to prevail had the block trade not been effected). Accordingly, large blocks presumably move price more often (and to a greater degree) than the analysis of trading data indicates. See Holthausen et al., *supra* note 37, at 257-60, 266; see also *id.* at 266 ("Block brokers contend that the mechanics of block trading can cause some buyer- or seller-initiated transactions to trade at the same price as the prior trade . . . , even though the block price is different from the market price prior to the block."); Kraus & Stoll, *supra* note 29, at 582-83.

⁴⁰ See Victor Niederhoffer & M.F.M. Osborue, *Market Making and Reversal on the Stock Exchange*, 61 J. AM. STAT. ASS'N 897 (1966); see also *infra* notes 70-76, 180-89 and accompanying text.

⁴¹ See Harris & Gurel, *supra* note 29, at 815-16; Holthausen et al., *supra* note 37, at 239-42; Kraus & Stoll, *supra* note 29, at 569-71; J. Randall Woolridge & Chinmoy Ghosh, *Institutional Trading and Security Prices: The Case of Changes in the Composition of the S&P 500 Index*, 9 J. FIN. RES. 13 (1986).

⁴² See *infra* note 335 and accompanying text.

more than one hypothesis.⁴³ In addition, because the process by which trades influence price is complicated, and because trades are handled differently in different securities markets, similar trading practices may affect prices differently in different markets.⁴⁴ In regulating trading, policy makers should recognize that the premises underlying regulation are necessarily complicated and controversial. In any case, I have no firm view about why trades sometimes change security prices, and I do not intend the commentary that follows to rest on any particular vision.⁴⁵

1. *Disparate Valuation*

The perfect substitution hypothesis rests on the presumption that all market participants agree on the value of all securities. As a result, the theory goes, it should be possible to buy or sell any amount of a security at the current market price. The remarkable depth of the securities markets does suggest that many market participants are willing to buy or sell at current prices. Securities are more easily replaced than almost anything else conventionally thought to be unique. Even someone who will not accept a substitute for a particular security will not need to pay a premium price for it if those from whom she must buy are prepared to accept substitutes. A startlingly large amount of

⁴³ Cf. Asquith & Mullins, *supra* note 29 (finding that price effects of seasoned equity issues are consistent with sloping demand curves and information); Bagwell, *Dutch Auctions*, *supra* note 35, at 79-80 (discussing various explanations for the price effects of large block sales); *id.* at 86-88 (stating that, if supply curves slope because holders have different information, "then the change to a new marginal shareholder may be tantamount to a change in the information impounded in the market price."); Fischel & Ross, *supra* note 8, at 517 (discussing alternative explanations for price effects of changes in the composition of the S&P 500 Index); Harris & Gurel, *supra* note 29, at 815-16 (noting that the price effects of block sales and new issues may be explained by price pressure or new information); Kraus & Stoll, *supra* note 29, at 569-71; Richard H. Pettway & Robert C. Radcliffe, *Impacts of New Equity Sales Upon Electric Utility Share Prices*, 14 FIN. MGMT. 16 (1985) (classifying price changes associated with new issues of stock by public utilities according to information and liquidity effects); Stout, *supra* note 27, at 1253-54 (conceding that several hypotheses can explain the price effects of large transactions).

⁴⁴ See KALMAN J. COHEN ET AL., *THE MICROSTRUCTURE OF SECURITIES MARKETS* 15-70 (1986) (comparing stock exchange trading arrangements); JOEL HASBROUCK & ROBERT A. SCHWARTZ, *THE EFFICIENCY OF STOCK EXCHANGE AND OVER-THE-COUNTER MARKETS* 31-33 (Salomon Bros. Ctr. for the Study of Fin. Insts. Working Paper No. 390, 1986) (concluding that trading-system design influences the accuracy of market prices).

⁴⁵ I understand Fischel and Ross to be agnostic as well. At times, however, they seem reluctant to concede that some trades do affect prices. For example, they introduce their discussion of manipulation with the statement: "If trading has no effect on price because of the substitution effect, a successful manipulation is impossible." Fischel & Ross, *supra* note 8, at 517. In addition, they maintain that considerable evidence supports the proposition that trading need not have any effect on price. *Id.* at 514. On the other hand, they acknowledge that "many block trades have stock price consequences," and state that because of bid-ask spreads, the sequence with which random buy and sell orders arrive in the market will cause price reversals. *Id.* at 515-16.

most securities can be bought or sold at or near the prevailing price,⁴⁶ and the demand for most actively publicly traded securities seems quite elastic.⁴⁷

The fact that many large trades are made at prevailing prices does not prove that all market participants believe that all securities are worth the prevailing price, however.⁴⁸ The resources devoted to finding buyers for large secondary offerings that might simply be sold into the market suggests that not all investors ascribe the same value to all securities.⁴⁹ Heterogeneous shareholder valuation may also help explain why buyers often must pay more than the prevailing market price to buy a very large amount of a particular security.⁵⁰ In any event, as skeptical commentators frequently remark, the assumption that all market participants have homogeneous expectations and ascribe the same value to all securities runs counter to common experience and intuition.⁵¹

Even if most securities have many near-perfect substitutes for most purposes, sometimes no adequate substitute exists for a particular security. A security is more than just the right to an income stream; it is the right to a particular income stream, with common stock also carrying the right to participate in the management of the

⁴⁶ See *supra* text accompanying notes 22-24.

⁴⁷ But see Stout, *supra* note 27, at 1252-58 (discussing evidence of unit elasticity).

⁴⁸ Although Fischel and Ross appear to acknowledge the possibility that the supply and demand for any given security might not be perfectly elastic, they seem unconvinced. See Fischel & Ross, *supra* note 8, at 516-17; see also *id.* at 517 n.62 (suggesting that price changes associated with changes in the S&P 500 Index may be due to real economic changes occasioned by inclusion in the index, rather than by trading). Others understand Fischel and Frank H. Easterbrook to have taken the position that demand is perfectly elastic. See Booth, *supra* note 20, at 1083; Carney, *supra* note 29, at 354-55; Stout, *supra* note 27, at 1242 n.39.

⁴⁹ See ROBERT L. KUHN, INVESTMENT BANKING: THE ART AND SCIENCE OF HIGH-STAKES DEALMAKING 271 (1990) (noting that firms selling stock typically encourage investment bankers to find long-term investors who will be loyal to incumbent management); Claudio F. Loderer et al., *The Pricing of Equity Offerings*, 29 J. FIN. ECON. 35, 36 (1991) (suggesting that underwriters actively promote seasoned offerings because they have incomplete knowledge of individual investors' demand schedules); cf. Parsons & Raviv, *supra* note 36, at 392-94 (contrasting underwritten and rights offerings).

⁵⁰ See Bagwell, *Dutch Auctions*, *supra* note 35; Bagwell, *Heterogeneity*, *supra* note 35; Carney, *supra* note 29, at 355-57; see also Booth, *supra* note 20, at 1087-1103 (surveying evidence and suggesting that block buying forces stock prices upward); Stout, *supra* note 27, at 1252-58 (providing empirical evidence regarding heterogeneous shareholder valuation); cf. Booth, *supra* note 20, at 1059 n.12 (listing works implicitly based on heterogeneous valuation).

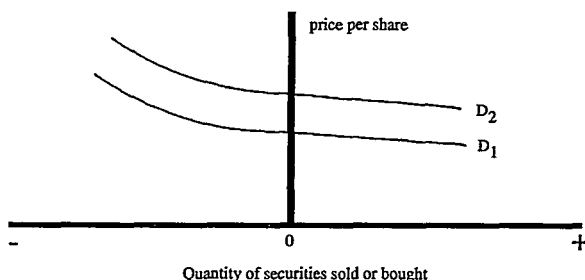
⁵¹ See SCHWARTZ, *supra* note 18, at 227-36, 272-73; Booth, *supra* note 20, at 1077-1103; Ronald J. Gilson, *Value Creation by Business Lawyers: Legal Skills and Asset Pricing*, 94 YALE L.J. 239, 252-53 (1984); Paul S. Schreiber & Robert A. Schwartz, *Efficient Price Discovery in a Securities Market: The Objective of a Trading System*, in MARKET MAKING AND THE CHANGING STRUCTURE OF THE SECURITIES INDUSTRY 19, 22-23 (Yakov Amihud et al. eds., 1985) [hereinafter MARKET MAKING]; Stout, *supra* note 27, at 1238 (describing the assumption of homogeneous expectations as "pure fiction"); cf. Booth, *supra* note 20, at 1059 n.12 (listing works implicitly based on the assumption that securities have sloping supply curves).

issuer. The supply of any particular security is limited, and someone who wants a particular security—for whatever reason—must pursue that finite supply. If some owners are unwilling to sell their securities at the prevailing price, a buyer will have to pay a premium price to get them.⁵² Thus, a person may be able to raise price by buying more stock than owners are prepared to sell at the prevailing price.

A purchase is presumably most likely to exceed the supply available at the prevailing price, and thus to move price, when only a small amount of a security is available for trading. Supply may be limited because little was issued in the first place or because a substantial amount is held by people who are reluctant to sell, perhaps because they are closely associated with the issuer.⁵³ Conversely, sales are most

⁵² The figure below illustrates situations in which the amount of a security that investors will buy or sell depends on the price.

FIGURE 2: DOWNWARD SLOPING EXCESS DEMAND FUNCTIONS



The curves labeled D_1 and D_2 each represent excess demand functions in which a change in price will alter net demand. The market clearing price (i.e., the price at which purchase and sale interest offset each other) is the price at which the curves intersect the price axis. At higher prices (represented by the portion of the curve on the negative side of the quantity axis), market participants as a group would want to sell more than they would want to buy. At lower prices, buying interest would exceed selling interest.

When a new trader enters the market, the excess demand function shifts to the right (left) by the number of shares the new trader is willing to buy (sell) at a particular price. Thus, if a person who wanted to buy entered a market characterized by curve D_1 , the excess demand curve would shift to the right to curve D_2 and the price would rise. Excess demand still shifts to the right (left) when a new buyer (seller) enters a market characterized by perfectly elastic demand, as in Figure 1, *supra* note 29, but shifting the horizontal line does not result in a change in the price at which purchase and sale interests intersect. This price stability follows from the willingness of other traders to buy or sell any amount of the security at the prevailing price.

⁵³ See Booth, *supra* note 20, at 1079-81 (discussing the value of controlling a block of shares). Small-capitalization stocks have recently figured prominently in so-called penny-stock manipulations. See Ferrara et al., *supra* note 31, at 224-41; Joseph I. Goldstein et al., *An Investment Masquerade: A Descriptive Overview of Penny Stock Fraud and The Federal Securities Laws*, 47 BUS. LAW. 773, 774 (1992); Joseph I. Goldstein & L. Delane Cox, *Penny Stock Markups and Markdowns*, 85 NW. U. L. REV. 676, 676 (1991); Theodore A. Levine & Gerard S. Citera, *Manipulative Practices—Current Enforcement and Regulatory Initiatives*, in MARKET MANIPULATION, *supra* note 31, at 3, 35-41; see also Joseph A. Grundfest, *Financial Scandals in the United States and Japan*, AM. ENTER., May/June 1992, at 34, 38-39 (noting that in both the United States and Japan, targets of manipulation typically have small capitalizations or easily controlled float). The untoward behavior attributed to penny-stock brokers is often

likely to exceed the amount demanded at the prevailing price when only a few people are interested in buying a security, as in the case of thinly traded securities⁵⁴ or speculative penny stocks. Thus, manipulation by taking advantage of inelastic supply is likely to be easier with thinly traded securities. In fact, such securities are the subject of many allegedly manipulative schemes.⁵⁵

2. *Immediacy*

Even if some market participants disagree with the market's valuation of a security, it may take very large trades—and the concomitant commitment of substantial resources—to move price by absorbing all

either grossly excessive commissions or simple fraud. See Goldstein & Cox, *supra*; see also Fischel and Ross, *supra* note 8, at 539-42. Calling this behavior manipulation may do little to further analysis. *Id.* at 540. Fischel & Ross minimize the possibility of a broker dominating the market, suggesting that customers could simply take their trades to other market makers. *Id.* at 541. Most descriptions of the penny-stock market, however, suggest that brokers in this market do not face effective competition. Nonetheless, penny-stock operators are often alleged to bid up the price of the stocks in which they deal, and they are able to do so because as they buy from the weakest holders, the reservation price of the marginal holders rises. Aggressive brokers are said to pressure clients to buy stock while effectively discouraging others from selling. See Goldstein et al., *supra*, at 786-88; William H. Lash, III, *Loose Change: The Campaign for Penny Stock Reform*, 60 UMKC L. REV. 1, 6, 13 (1991); Levine & Citera, *supra*, at 35-36, 38, 47.

⁵⁴ See Booth, *supra* note 20, at 1100, 1105; Hideki Kanda & Saul Levmore, *The Appraisal Remedy and the Goals of Corporate Law*, 32 UCLA L. REV. 429, 446 (1985) ("it is more likely that shares . . . are fairly associated with inframarginal value when they are not actively and widely traded"); Stout, *supra* note 27, at 1251-52, 1256 n.107, 1258 n.119. A recent study of Dutch auction issuer repurchases developed preliminary findings indicating "that supply curves are more elastic when institutional holdings are high, dividend yield is high, price has not varied much in the past 5 years, and the fraction bought . . . is large." Bagwell, *Heterogeneity*, *supra* note 35, at 221. The author of that study subsequently concluded that elasticity is larger "for firms with large trading volume, firms included in the S&P 500 Index, and firms that have been the targets of takeover activity." Bagwell, *Dutch Auctions*, *supra* note 35, at 97. The market for the stock of companies that repurchase their stock in Dutch Auctions may differ from the market for thinly traded companies, but the factors that seem to indicate inelasticity in this study also characterize the thinly traded and speculative stocks that are typically the subject of alleged manipulations.

⁵⁵ See William R. McLucas & Alma M. Angotti, *Market Manipulation*, 22 REV. SEC. & COMMODITIES REG. 103, 111 (1989); John E. Pinto, Jr., *The NASD's Enforcement Agenda*, 85 NW. U. L. REV. 739, 745-46 (1991) (noting that NASD penny-stock cases typically involve brokers who control the market in certain securities); see also Fischel & Ross, *supra* note 8, at 518 ("It is frequently asserted that thinly traded stocks are more prone to manipulation . . . perhaps because information and price pressure effects . . . may be accentuated in this case."); Lawrence Kryzanowski, *Misinformation and Security Markets*, 24 MCGILL L.J. 123, 123 (1978). When the Exchange Act was enacted, it was widely believed that manipulators were most likely to operate in stocks with "easily controllable floating supply." Comment, *Market Manipulation and the Securities Exchange Act*, 46 YALE L.J. 624, 626-27 (1937). Manipulators were said to control supply by getting large holders to promise to keep their shares off the market. *Id.* at 627 n.14; see also 8 LOSS & SELIGMAN, *supra* note 39, at 3973 (listing devices used by manipulators to "dry up" the overhanging supply of the [manipulated] security."). After restricting supply, manipulators could allegedly bid up the share price by buying, without fear that their purchase orders would be met by a flood of sales.

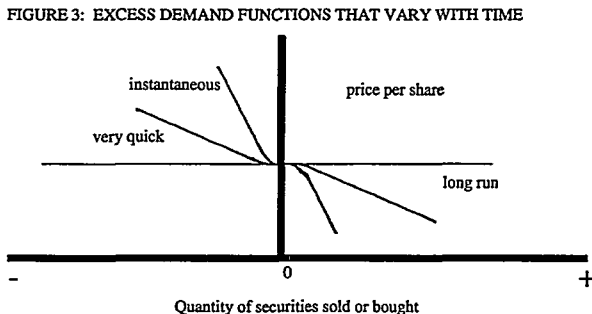
of the securities supplied or demanded at the prevailing price.⁵⁶ However, even if enough people are willing to trade at the prevailing market price, so that a trade "need not have any effect on securities prices," those willing to trade at prevailing prices are not always represented in the market.⁵⁷ A trade may move price when people who would be willing to trade at the prevailing price are absent from the market.⁵⁸ In other words, even if the potential supply and demand are perfectly elastic, a trade may move price if potential offsetting traders are not mobilized.⁵⁹

⁵⁶ That is, all but the largest traders may effectively face perfectly elastic demand. See Carney, *supra* note 29, at 355; Alan Schwartz, *The Fairness of Tender Offer Prices in Utilitarian Theory*, 17 J. LEGAL STUD. 165, 188-89 (1988) (concluding that it is realistic to assume that shareholder values are captured in market values, although some people do derive unique value from particular securities); Stout, *supra* note 27, at 1249-51 (Because investor demand for stock is convex, at "the margin, the demand function is relatively 'flat,' so that transactions exert only modest pressure on prices."); see also Fischel & Ross, *supra* note 8, at 513 n.39. This proposition is illustrated by an excess demand curve that is close to horizontal around the price axis in Figure 2, *supra* note 52.

⁵⁷ See Sanford J. Grossman, *The Informational Role of Upstairs and Downstairs Trading*, 65 J. Bus. 509, 511-14 (1992) (discussing reasons people do not participate continuously in the market).

⁵⁸ See Harold Demsetz, *The Cost of Transacting*, 82 Q.J. ECON. 33, 36 (1968); Grossman, *supra*, note 57; Kraus & Stoll, *supra* note 29, at 570-71; cf. Harris & Gurel, *supra* note 29, at 815-16 (stating that the price-pressure hypothesis, which the authors conclude may explain the price effect of inclusion in the S&P 500 list, "assumes that long-run demand is perfectly elastic . . . [but recognizes that] short-term demand curves may be less than perfectly elastic."); Scholes, *supra* note 36, at 186 ("In any attempt to measure the slope of a demand curve, it is, of course, essential to specify the relevant time span. In the very shortest of short runs, all demand curves will be almost perfectly inelastic. Yet, by waiting perhaps only a trivial length of time until news of a proposed sale had spread throughout the market, the sale might be effected without price-pressure effects."); HASBROUCK & SCHWARTZ, *supra* note 44, at 15 (noting the possibility that demand is relatively inelastic in very brief trading intervals).

⁵⁹ The figure below illustrates situations in which traders must pay a premium price for trading quickly.



This model assumes that the long-run demand for a security is perfectly elastic, so that an infinite amount can be bought or sold at the prevailing price. The market maker will trade some quantity at close to the prevailing price, but to trade more immediately, a buyer (seller) will have to pay a premium (accept a low price). This premium will increase as more securities are traded. Excess demand functions representing the situation faced by traders who want to trade quickly are shown by the curves labeled "instantaneous" and

Most of the cost associated with trading stock reflects the expense of finding someone to take the other side of the trade.⁶⁰ Investors turn to the markets to find trading partners quickly and cheaply,⁶¹ and organized securities markets are conventionally thought to develop in response to investors' desires to trade quickly.⁶² In an earlier article, Fischel himself stated that, "[a]s with all marketplaces, the primary benefit of [stock] exchanges is that they save traders the cost of independently searching for someone on the other side of the transaction."⁶³

Some trading interest is likely to be represented in the markets at any given time, as traders enter market orders and price changes trigger limit orders.⁶⁴ A significant part of NYSE trading, for example, is made up of transactions between public customers.⁶⁵ Those who might buy or sell are not constantly represented in the market, how-

"very quick." These curves are relatively flat around the price axis because the market maker will trade small quantities around that price. The demand function faced by a trader in a hurry depends on the speed with which the trader wishes to complete the transaction. The trader can reduce the premium necessary to trade a particular quantity by waiting to trade, thereby moving to a longer-term demand function (e.g., from instantaneous to very quick). The trader can avoid the premium entirely by waiting long enough to trade. The wait necessary to avoid any premium may be very short.

⁶⁰ RICHARD R. LINDSEY & ULRIKE SCHAEDE, SPECIALIST VS. SAITORI, MARKET MAKING IN NEW YORK AND TOKYO 21 (Yale Sch. of Org. & Mgmt. Working Paper No. 26, 1992); see also Charles C. Cox & Douglas C. Michael, *The Market for Markets: Development of International Securities and Commodities Trading*, 36 CATH. U.L. REV. 833, 842-43 (1987).

⁶¹ Yakov Amihud & Haim Mendelson, *The Effect of Computer Based Trading on Volatility and Liquidity*, in INFORMATION TECHNOLOGY, *supra* note 19, at 59, 59-60; Macey & Kanda, *supra* note 18, at 1018-20.

⁶² See ROBERT W. HAMILTON, FUNDAMENTALS OF MODERN BUSINESS 648 (1989); Amihud & Mendelson, *supra* note 61, at 59-82; Norman S. Poser, *Restructuring the Stock Markets: A Critical Look at the SEC's National Market System*, 56 N.Y.U. L. REV. 883, 886 (1981); see also H. Kent Baker & Richard B. Edelman, *AMEX-to-NYSE Transfers, Market Microstructure, and Shareholder Wealth*, 21 FIN. MGMT. 60 (1992) (noting that issuers switch from AMEX to NYSE when the latter provides liquidity benefits); Arnold R. Cowan et al., *Explaining the NYSE Listing Choices of NASDAQ Firms*, 21 FIN. MGMT. 73 (1992) (finding that issuers look to liquidity benefits when choosing between NASDAQ and NYSE markets); cf. Macey & Kanda, *supra* note 18, at 1010-24 (arguing that liquidity is only one of the services that exchange markets offer).

⁶³ Daniel R. Fischel, *Organized Exchanges and the Regulation of Dual Class Common Stock*, 54 U. CHI. L. REV. 119, 121 (1987); see also Cox & Michael, *supra* note 60, at 842-43 (noting that markets reduce search costs for buyers and sellers); Nicholas Wolfson et al., *The Securities Markets: An Overview*, 16 HOW. L.J. 791, 811 (1971) ("The economic purpose of a stock exchange is to bring together buyers and sellers in one central market.").

⁶⁴ See Demsetz, *supra* note 58, at 40-41, 43-44; Grossman, *supra* note 57, at 513.

⁶⁵ See NYSE FACT BOOK 19 (1990) (specialists were either buyer or seller in 19% of share volume in 1989, and less than half of volume involved a NYSE member trading as principal); Poser, *supra* note 62, at 889; see also Cowan et al., *supra* note 62, at 75 (investors can bypass specialists and trade with each other on the exchanges within the spread); LINDSEY & SCHAEDE, *supra* note 60, at 17 (suggesting that since specialists rarely participate in block trading, the 19% specialist-participation figure implies that specialists participate in about 39% of trading at their posts).

ever,⁶⁶ and an investor who wants to trade more than other investors present in the market at prevailing prices must either wait or offer a premium to attract other traders to the market.⁶⁷ Market makers, such as specialists on the exchanges, stand willing to take the other side of many trades.⁶⁸ This service has a price, however, since market makers must be compensated for being available and for bearing the risk of taking a position.⁶⁹ This compensation takes the form of a premium price; market makers offer to buy at one price and to sell at a higher one.

If market makers supply immediacy,⁷⁰ then the bid-ask spread is a cost of trading immediately.⁷¹ Because of the spread, the sequence of orders reaching the market may cause changes in reported prices. For example, if a market maker buys at the bid price and then sells at

⁶⁶ See Schreiber & Schwartz, *supra* note 51, at 24-25 (explaining how costs of trading impede price discovery); see also Grossman, *supra* note 57, at 511-14 (discussing the failure of continuous participation and its consequences).

⁶⁷ A price that either triggers limit orders or attracts the attention of other market participants may mobilize traders. See Grossman, *supra* note 57, at 513 ("The customer who was interested in selling the stock [but was not in the market] will see the price rise and offer his stock for sale. The overall transaction is effected by prices conveying information to customers . . ."); HASBROUCK & SCHWARTZ, *supra* note 44, at 15 ("The temporary price changes act primarily as a sweetener to attract new orders to the market."); Allen R. Myerson, *Less is Brewing in Witching Hours*, N.Y. TIMES, March 23, 1993, at D1 (finding that NYSE announcements of order imbalances attract offsetting orders and stabilize prices); cf. P.C. Grier & P.S. Albin, *Nonrandom Price Changes in Association with Trading in Large Blocks*, 46 J. BUS. 425 (1973) (suggesting that investors need about 15 minutes to trade in response to a trade's appearing on the tape).

⁶⁸ See 17 C.F.R. § 240.11b-1(a)(2)(iii) (1993) (requiring specialists to maintain fair and orderly markets); 2 NYSE Guide (CCH) ¶ 2104 (1991); 2 Am. Stock Ex. Guide (CCH) ¶ 9310 (1989); see also Dale A. Oesterle et al., *The New York Stock Exchange and Its Outmoded Specialist System: Can the Exchange Innovate to Survive?*, 17 J. CORP. L. 223 (1992); Nicholas Wolfson & Thomas A. Russo, *The Stock Exchange Specialist: An Economic and Legal Analysis*, 1970 DUKE L.J. 707.

⁶⁹ See Demsetz, *supra* note 58; Holthausen et al., *supra* note 37, at 240; Niederhoffer & Osborne, *supra* note 40, at 904-05. Market makers must also be compensated for the possibility that they may be trading with informed investors. See Lawrence R. Glosten, *Insider Trading, Liquidity, and the Role of the Monopolist Specialist*, 62 J. BUS. 211 (1989); see also David Easley & Maureen O'Hara, *Price, Trade Size, and Information in Securities Markets*, 19 J. FIN. ECON. 69 (1987) (suggesting that the possibility that large trades convey information can fully account for the price impact of large trades).

⁷⁰ See Demsetz, *supra* note 58, at 35-37; see also Amihud & Mendelson, *supra* note 61 (noting the immediacy services that market makers provide); SCHWARTZ, *supra* note 18, at 332-40, 389-91; Hans R. Stoll, *Alternative Views of Market Making*, in MARKET MAKING, *supra* note 51, at 67, 78-82 (same); Jack L. Treynor, *The Economics of the Dealer Function*, FIN. ANALYSTS J., Nov.-Dec. 1987, at 27 (defining market maker as someone who accommodates traders for whom time is important).

⁷¹ See Demsetz, *supra* note 58, at 39-45; see also SCHWARTZ, *supra* note 18, at 169-70, 332-33, 389-91; Cox & Michael, *supra* note 60, at 843-44; cf. SCHWARTZ, *supra* note 18, at 391-97 (discussing other services provided by market makers). The spread is usually very small on the NYSE. See NYSE FACT BOOK 22 (1990). The spread is larger for smaller issuers with less trading volume. See Richard Roll, *A Simple Implicit Measure of the Effective Bid-Ask Spread in an Efficient Market*, 39 J. FIN. 1127 (1984); HASBROUCK & SCHWARTZ, *supra* note 44, at 14, 31.

the ask price, the price of the two consecutive trades will differ by the amount of the bid-ask spread.⁷² Thus, as Fischel and Ross recognize, an order to sell (buy) stock at the market that is filled after a buy (sell) order will decrease (increase) the reported price.⁷³ Brokerage firms and their employees are well situated to engineer the change between bid and ask prices, and sometimes this price change can create substantial profits.⁷⁴

The bid-ask spread may not be the full measure of the potential price impact of executing a trade quickly, however.⁷⁵ Market makers will be reluctant to take the opposite position in extremely large trades even at a premium, and they may lack the capital to do so anyway.⁷⁶ Stock exchange specialists are required to trade to keep the market orderly, but they are not required to support prices or keep them stable. The prices at which they offer to buy or sell are good for only limited quantities of securities.⁷⁷

Traders usually take care not to overwhelm the market when they believe that the unaided market cannot immediately accommodate their large trades.⁷⁸ Their brokers may search for offsetting interest

⁷² Demsetz, *supra* note 58; Niederhoffer & Osborne, *supra* note 40; Roll, *supra* note 71, at 1128-30; *see also* Fischel & Ross, *supra* note 8, at 516; SCHWARTZ, *supra* note 18, at 408-09 (distinguishing between realized and quoted spreads); HASBROUCK & SCHWARTZ, *supra* note 44, at 14-15 (discussing bid-ask spreads in larger markets).

⁷³ Fischel & Ross, *supra* note 8, at 516; *cf.* Ronald C. Lease et al., *An Investigation of Market Microstructure Impacts on Event Study Returns*, 46 J. FIN. 1523 (1991) (arguing that a significant part of abnormal returns conventionally associated with seasoned equity offerings can be explained by spread bias resulting from a preponderance of sell orders on the day before the offering).

⁷⁴ *See infra* notes 180-89 and accompanying text.

⁷⁵ Fischel and Ross can be understood to treat the bid-ask spread as the full measure of the price impact of trading immediately. They call the price premium (discount) that a trader must pay (accept) a liquidity cost, and indicate that all traders bear it because of bid-ask spreads. Fischel & Ross, *supra* note 8, at 516. They do not, however, acknowledge that it may be impossible to trade large quantities at the quoted spread, nor do they discuss the upstairs market, the existence of which documents the limits of the liquidity that market makers provide. *See infra* notes 78-87 and accompanying text. They do, however, acknowledge that a trader who insists on trading immediately may be unable to do so at the prevailing price because offsetting interest may be absent at the moment that the order reaches the market. Fischel & Ross, *supra* note 8, at 515-16.

⁷⁶ *See* 5 LOSS & SELIGMAN, *supra* note 39, at 2514-16; Hasbrouck, *supra* note 38, at 200-02; Macey & Kanda, *supra* note 18, at 1028-32; *see also* Poser, *supra* note 62, at 952-56 (noting that specialists may not always have sufficient capital to function properly).

⁷⁷ *See, e.g.*, 2 NYSE Guide (CCH) ¶ 2104.10 (1991); *see also* 5 LOSS & SELIGMAN, *supra* note 39, at 2524-25 (noting that specialist's obligation to deal for his own account is not unlimited); SCHWARTZ, *supra* note 18, at 30; Macey & Kanda, *supra* note 18, at 1025-34 (noting that market makers do not always have the incentive or capital to maintain price continuity); Oesterle et al., *supra* note 68, at 268-95 (discussing evaluation of specialists); Stoll, *in* MARKET MAKING, *supra* note 70, at 74-77 (discussing the market as price stabilizer); *cf.* *United States v. Mulheren*, 938 F.2d 364, 368-70 (2d Cir. 1991) (price increase created by buying more than the specialist would sell).

⁷⁸ Consider the Bank of England's sale of approximately \$970,000,000 of British Petroleum stock at only a small discount, which Richard Brealey and Stewart Myers cite as a

or effect the trades in smaller amounts over an appropriate period of time.⁷⁹ When traders believe their orders cannot be handled on the exchange floor without a price concession, they often turn to the firms that comprise the so-called upstairs market.⁸⁰ These firms make a business of facilitating large trades and locating any trading interest that is not registered on the floor.⁸¹ The upstairs market, which competes with the floor in providing liquidity, exists in part because very large trades can overwhelm the trading interest that is present on the floor.⁸² The capital, expertise and specialized facilities devoted to the

remarkable example of the extreme elasticity of demand for securities. See BREALEY & MYERS, *supra* note 22, at 308. As Brealey and Myers emphasize, the Bank took applications for nearly two weeks before the sale. *Id.*

⁷⁹ See SCHWARTZ, *supra* note 18, at 108 ("Medium size orders are worked on the exchange to avoid the price impact of a market order or the price impact attributable to the option value of a revealed limit order."); Jerry A. Hausman et al., *An Ordered Probit Analysis of Transaction Stock Prices*, 31 J. FIN. ECON. 319, 321 (1992) ("A floor broker seeking to unload 100,000 shares of stock will generally break up the sale into smaller blocks to minimize the price impact of the trades."); see also MARTIN MAYER, *MARKETS* 37 (1988) (recognizing that brokers with large orders will bide their time and split orders); Hausman et al., *supra*, at 351, 352-53 (noting that brokers tend to split large orders and time the execution of trades); cf. Lawrence M. Benveniste et al., *What's Special About the Specialist?*, 32 J. FIN. ECON. 61, 67 (1992) (finding that specialists extract concessions from brokers by working orders for them).

⁸⁰ 5 LOSS & SELIGMAN, *supra* note 39, at 2573; SCHWARTZ, *supra* note 18, at 26-27.

⁸¹ See SCHWARTZ, *supra* note 18, at 111 ("the negative market impact [of large trades is] limited by the information gathering, selling, and risk taking activities of the block trader"); Grossman, *supra* note 57, at 511-14; see also Macey & Kanda, *supra* note 18, at 1032 ("[T]he rise of block trading has caused trading by investment bankers, serving in their capacity as 'upstairs market makers,' to assume the role traditionally performed by specialists on the exchange. These investment bankers, and not the exchange specialists, are the real providers of liquidity for the block trading that has become the dominant form of trading in modern securities markets."). Indeed, the NYSE rules that regulate block positioning recognize the limited ability of the floor to handle large trades. See 2 NYSE Guide (CCH) ¶ 2127 (1991); see also *id.* ¶ 2097; Russo & Lobel, *supra* note 31, at 79. The NYSE defines trades of over 10,000 shares as block trades, and over half of the trading volume on the NYSE is effected in such block trades. NYSE FACT BOOK 17 (1990). However, the market is able to handle many trades of 10,000 shares without disruption. See Holthausen et al., *supra* note 37, at 244 n.9.

⁸² See Grossman, *supra* note 57, at 512-13 (describing the upstairs market as a depository for information about unexpressed demand); see also Duane J. Seppi, *Equilibrium Block Trading and Asymmetric Information*, 45 J. FIN. 73, 89 (1990) (noting that in the upstairs market, a trader can obtain better prices by signalling that she is uninformed); HAMILTON, *supra* note 62, § 18.7; 5 LOSS & SELIGMAN, *supra* note 39, at 2570-78; SCHWARTZ, *supra* note 18, at 106-13, 147; Holthausen et al., *supra* note 37, at 265-66; Macey & Kanda, *supra* note 18, at 1028-29. The off-exchange market in exchange-listed stocks developed, in part, as a response to fixed commission rates on the NYSE, which have since been abolished. See MAYER, *supra* note 79, at 38-39; James L. Hamilton, *Electronic Market Linkages and the Distribution of Order Flow: The Case of Off-Board Trading of NYSE-Listed Stocks*, in INFORMATION TECHNOLOGY, *supra* note 19, at 265; Poser, *supra* note 62, at 898-901, 937; Wolfson et al., *supra* note 63, at 824-25.

upstairs market cogently document the fact that large trades taken directly to the trading floor will disrupt price.⁸³

The idea that rapidly executed trades can distort prices might seem inconsistent with the fact that very large blocks of stock are usually traded at or very near the prevailing market price. It might also seem inconsistent with the widely held belief that much of the price change occasioned by large trades is due to the information thought to be impounded in those trades and not to the pressure of those trades overwhelming the market.⁸⁴ For example, Fischel and Ross argue that the evidence suggesting that almost one-half of all large trades are effected at the same price as the preceding trade demonstrates that a would-be manipulator cannot be confident that large trades will move price.⁸⁵ However, the minimal price effects that typically attend large trades do not show that a large trade designed to move price will not do so. In fact, this evidence does not even show that a carelessly executed trade can be made at the prevailing price.

The large blocks that are traded at or near prevailing market prices are typically constructed so as to minimize or entirely avoid making price concessions. Traders usually want to trade at the best price possible, and if they expect a trade to overwhelm the market they will not trade immediately. Instead, they will instruct their brokers to work the trades or turn to the upstairs market.⁸⁶ Thus, it is hardly surprising that large trades are seldom effected in a way that dramatically changes price by temporarily overwhelming supply or demand. Indeed, it would be surprising to find that many traders were willing to pay extra to trade quickly.⁸⁷

Most of the evidence indicating that large trades have a minimal impact on stock prices relates to NYSE trading. The prices at which

⁸³ The firms that handle large trades have specialized communications facilities and expertise in locating trading interest, all developed at considerable cost. See HAMILTON, *supra* note 62, at 426; 5 LOSS & SELIGMAN, *supra* note 39, at 2573-77; SCHWARTZ, *supra* note 18, at 107-13. Computerized institutional trading systems allow institutions to trade large blocks among themselves. HAMILTON, *supra* note 62, at 426-27; 5 LOSS & SELIGMAN, *supra* note 39, at 2577-78.

⁸⁴ See *infra* part I.B.3.

⁸⁵ Fischel & Ross, *supra* note 8, at 517. Fischel and Ross offer Robert W. Holthausen and others to support the statement that "nearly half of all block trades occur with no change in price." *Id.* at 517 n.63 (citing Holthausen et al., *supra* note 37). However, Holthausen et al. explain that stock exchange rules may distort the trading record, so that their figures understate the frequency with which large trades change price. See Holthausen et al., *supra* note 37, at 257-60, 266; see also *supra* note 39 (discussing the execution of large trades).

⁸⁶ See *supra* note 78 and accompanying text. Fischel has noted elsewhere that a broker handling a large trade will bypass the specialist on the exchange floor and directly "call other dealers and institutions to find one interested in the other end of the deal." Fischel, *supra* note 63, at 126.

⁸⁷ Cf. SCHWARTZ, *supra* note 18, at 106-07 (suggesting that institutions will pay extra transaction costs to sell but not to buy).

trades are effected on the Exchange are the product of the profit-maximizing behavior of traders. In addition, large trades are often executed on the floor of the Exchange only after they are arranged in the upstairs market.⁸⁸ Accordingly, the great liquidity indicated by an analysis of NYSE trading data reflects the use of liquidity-enhancing devices. The fact that trades carefully structured to minimize their impact do not move price much does not mean that unstructured trades or trades structured to have an impact will fail to change prices. On the contrary, traders go to considerable lengths to minimize the effects of their trades precisely because unstructured trades might "generate severe, adverse price effects if simply presented to the market."⁸⁹

The same article that Fischel & Ross cite for the proposition that large blocks typically trade at market price emphasizes the limited relevance of this finding to our inquiry.⁹⁰ It begins with the caveat that traders can select the lowest cost alternative for trading, and "[t]hus, the results in the paper do not measure the costs of immediacy (i.e., the price disadvantage of transacting immediately) for a security selected at random. Rather, the results indicate the actual price effects associated with large trades given traders' maximizing behavior."⁹¹ The article ends on the same note, reiterating that the transactions studied resulted from maximizing behavior—in particular, searches for low-cost execution—and stating that "[t]he price effects documented in this paper should not be extrapolated to large transactions in securities selected at random."⁹²

Studies that focus on the impact of corporate sales of new stock and substantial secondary distributions reveal even less about the effect of immediate trading, for such sales are typically handled by investment bankers who expend time and resources to find buyers.⁹³

⁸⁸ Cf. 5 LOSS & SELIGMAN, *supra* note 39, at 2576 (block positioners are generally obligated to execute block trades on an exchange floor).

⁸⁹ Roberts, at 106.

⁹⁰ See Fischel & Ross, *supra* note 8, at 514 n.46 (citing Holthausen et al., *supra* note 37).

⁹¹ Holthausen et al., *supra* note 37, at 239.

⁹² Holthausen et al., *supra* note 37, at 265; see also Hausman et al., *supra* note 79, at 350-53 (even flexible and powerful statistical model of stock trading does not reveal the price impact of large orders that are not executed in small bundles to obtain the best average price).

⁹³ Myron Scholes' study is probably the most influential. Scholes studied secondary distributions that were typically underwritten by investment bankers and sold after the close of the market to subscribers at a subscription price at or near the closing price. See Scholes, *supra* note 36, at 185. Scholes found these distributions uniquely appropriate for his study precisely because the investment bankers had informed potential buyers of the availability of the block. *Id.* at 186. In any event, Scholes analyzed daily return data, and thus, his results do not illuminate any immediacy costs that sellers may have incurred. See *id.* at 186-87; see also THOMAS E. COPELAND & J. FRED WESTON, FINANCIAL THEORY AND CORPORATE POLICY 371-72 (3d ed. 1988) (discussing the Scholes study). Studies of blocks

Moreover, many new issues and secondary distributions must be registered with the SEC before they can be completed, and the delay between the filing of a registration statement and its effective date allows substantial time for potential buyers to mobilize.⁹⁴

Conventional traders try to get the best prices they can, employing disruption-minimizing techniques to ensure that they buy at the lowest price possible and sell at the highest. Manipulators, on the other hand, desire just the opposite: they want their purchases to push prices up, and their sales to pull them down. Inasmuch as manipulators act on perverse incentives, the mechanisms that have developed to help conventional traders will not keep manipulators from moving prices. Indeed, the development of these mechanisms suggests that unassisted large trades do change price. A manipulator who wants to disrupt reported prices may be able to do so simply by foregoing investment bankers or the upstairs market and taking a large trade directly to the trading floor and effecting it all at once.

Although hastily effected trades can be used to move prices, the would-be manipulator who takes this tack faces a special problem. If the price of a security changes because a trade is effected too quickly, the new price will be short lived.⁹⁵ The price change occasioned by executing a trade without allowing the market to mobilize is temporary because market participants who were away from the market when the trade occurred will come to the market when they see that trades are being effected at premium prices. In fact, the predictability of this reaction allows specialists and other market makers to provide offsetting trades for a relatively small premium, thereby reducing the price effect of large trades.⁹⁶ It follows that the more people pay attention to trading in a particular security, the less impact large trades will have on price. Again, the prices of thinly traded securities are moved more easily than those of widely held securities.⁹⁷

traded during regular market hours consistently indicate that large sales often depress price temporarily, suggesting that there is an immediacy cost, even for traders trying to get the best price possible. See Larry Y. Dann et al., *Trading Rules, Large Blocks and the Speed of Price Adjustment*, 4 J. FIN. ECON. 3 (1977); Holthausen et al., *supra* note 37; Kraus & Stoll, *supra* note 29.

⁹⁴ See Pettway & Radcliffe, *supra* note 43 (studying registered new issues and noting effect of offering announcement on price); Scholes, *supra* note 36, at 204-06 (discussing price effects of registered secondary distributions).

⁹⁵ Economists look to the duration of price changes to determine whether they result from immediacy or some other factor. See Kraus & Stoll, *supra* note 29; Pettway & Radcliffe, *supra* note 43.

⁹⁶ See Fischel, *supra* note 63, at 121-22; cf. Treynor, *supra* note 70 (arguing that the spread is determined by trades of value-based investors).

⁹⁷ See William J. Carney, *Signalling and Causation in Insider Trading*, 36 CATH. U. L. REV. 863, 887 (1987) ("In perhaps as many as seven hundred firms, liquidity is sufficient to allow institutions to take substantial investment positions or liquidate their holdings without lowering prices.").

I address the possibility of profiting from manipulated prices below, but it is not giving away much to say that it may be hard to profit from price changes that last only a few minutes. However, if a price move triggers a sympathetic response in the market, the trading of other market participants may prevent price from returning to its previous level, even as other market participants are mobilized.⁹⁸ More importantly, a manipulator may be able to profit from moving prices even briefly. Remarkably large profits can sometimes be secured by moving prices just a very small amount for a very short time.⁹⁹

3. *Altered Expectations*

Security prices rise and fall with changes in the market's expectations about the income that securities will produce, and those expectations change as new information becomes available.¹⁰⁰ Trades may convey relevant information, and as such are important determinants of market prices.¹⁰¹ For example, if market participants believe that the person who initiated a particular trade possessed nonpublic information relevant to a security's value, the trade will cause them to reevaluate the security and its price will change accordingly.¹⁰² Indeed, Fischel has suggested elsewhere that insider trading tends to move prices,¹⁰³ and there is at least some evidence that informed trad-

⁹⁸ See *infra* part I.B.3.

⁹⁹ See *infra* part II.A.

¹⁰⁰ See Gilson & Kraakman, *supra* note 29. The price effect of changed market expectations is illustrated by a shift of the excess demand function for a security. For example, in both Figure 1, *supra* note 29, and Figure 2, *supra* note 52, line D₂ represents a situation in which investors will purchase more of the security at any price than investors will purchase at that price in the situation represented by line D₁. A positive development that leads the market to a more optimistic evaluation of a security is illustrated by a shift from line D₁ to line D₂.

¹⁰¹ See Gilson & Kraakman, *supra* note 29, at 569-79.

¹⁰² See, e.g., BREALEY & MYERS, *supra* note 22, at 349-50 (discussing market reaction to new issues); Scholes, *supra* note 36, at 182-84 (discussing price changes under the efficient-market model); cf. Glosten, *supra* note 69, at 215-23 (suggesting that competitive market makers will sometimes refuse to trade when some market participants have informational advantages); Seppi, *supra* note 82 (a trader who can demonstrate it lacks information can get better price in upstairs market). The information thought to be contained in trades continues to influence price until it ceases to be relevant or is discovered to be incorrect. Trades that change market participants' expectations about the value of a security change the security's price even if the demand for the security is perfectly elastic and always present in the market. See Holthausen et al., *supra* note 37, at 240; see also Fischel & Ross, *supra* note 8, at 514-15.

¹⁰³ Dennis W. Carlton & Daniel R. Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857, 866-68 (1983); cf. *id.* at 892-93 (recognizing that insiders might use the information signal of their purchases to manipulate price, but concluding that this is a short-run phenomenon that corporate insiders will not use for fear that it will damage the value of their human capital); see also FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* 256-57 (1991) ("At the extreme, trading by insiders is as revealing as disclosure."); Frank H. Easterbrook & Daniel R. Fischel, *The Proper Role of a Target's Management in Responding to a Tender Offer*, 94 HARV. L. REV. 1161, 1168 n.18 (1981)

ing moves prices significantly even when informed traders try to hide their trades.¹⁰⁴ The communicative aspect of trading is one of the conventional explanations for the fact that some trades do cause price changes.¹⁰⁵ In fact, the information content of trades may explain all price changes associated with trading, including price changes associated with rapidly executed trades and price changes sometimes said to show that investors place different values on securities.¹⁰⁶

A manipulator may be able to change a security's price by trading in a way that convinces other market participants that privately informed traders believe the security is mispriced. For example, a manipulator might increase (decrease) a security's price by entering purchase (sale) orders in a pattern that suggests that people with valuable nonpublic information are buying (selling).¹⁰⁷ Some trading practices may be so indicative of an informed trader that the manipulator will be able to achieve the desired result by mimicking them.¹⁰⁸

Large trades may be well tailored to convey the impression that the trader has information. Market participants may believe that those with the resources to trade on a large scale are more likely to have access to nonpublic information, and that those with information will make large trades, since their profits are a function of the amount they trade.¹⁰⁹ Large trades effected in a way that overwhelms

(arguing that "if there were no prohibitions against insider trading, shares would not sell for less than a price incorporating all information, since insider trades would move prices to reflect even corporate secrets").

¹⁰⁴ Lisa K. Meulbroek, *An Empirical Analysis of Illegal Insider Trading*, 47 J. FIN. 1661 (1992).

¹⁰⁵ See BREALEY & MYERS, *supra* note 22, at 349-50; Holthausen et al., *supra* note 37; Kraus & Stoll, *supra* note 29; Scholes, *supra* note 36; cf. Martin Kimel, Note, *The Inadequacy of Rule 10b-5 to Address Outsider Trading by Reporters*, 38 STAN. L. REV. 1549, 1565 (1986) ("The underlying principle of the [efficient capital market hypothesis] is that investors transmit information to the market by trading.").

¹⁰⁶ Cf. Fischel & Ross, *supra* note 8, at 517 (suggesting that new information may explain price effect of changes in S&P 500 list).

¹⁰⁷ See Allen & Gale, *supra* note 19, at 509; Gilson & Kraakman, *supra* note 29, at 574 n.81, 576 n.88. Market participants and researchers usually understand trades effected above the previous price to be buyer-initiated and trades effected below the previous price to be seller-initiated. See Holthausen et al., *supra* note 37, at 244, 254-56, 265-66.

¹⁰⁸ Mimicking trades play a key role in many economic models of manipulation. See Allen & Gale, *supra* note 19; Allen & Gorton, *supra* note 19; Gerard & Nanda, *supra* note 19; Jarrow, *supra* note 19; Kumar & Seppi, *supra* note 19; Karl S. Okamoto, *Rereading Section 16(b) of the Securities Exchange Act*, 27 GA. L. REV. 183 (1992); BAGNOLI & LIPMAN, *supra* note 19.

¹⁰⁹ See Holthausen et al., *supra* note 37, at 240 ("The size of the transaction may . . . proxy for the amount of information the trader has about a firm."); Scholes, *supra* note 36, at 183-84; Thel, *supra* note 17, at 403-04; see also Easley & O'Hara, *supra* note 69 (arguing that informed traders prefer trading large blocks because trade size changes perceptions of the value of the underlying asset); Glosten, *supra* note 69; Hasbrouck, *supra* note 38, at 200-02 (bid-ask spread widens in response to large trades, suggesting that market-makers infer information from large trades); cf. SCHWARTZ, *supra* note 18, at 107 (Block sellers cannot use limit orders because they will, "correctly or erroneously, . . . be interpreted as a symbol

the trading interest present in the market may be particularly likely to lead market participants to believe that the trader has important insights. Since most traders want to trade at the best price possible (buying low or selling high), a trade that appears not to have been structured to minimize the cost of trading quickly may convey the impression that the trader has reason to be confident that price will change soon.¹¹⁰

Purchases may be more likely to create the impression of informed trading than sales.¹¹¹ Sales are more apt to be motivated by reasons unrelated to the traders' sense that the market price is wrong. While a need to raise cash or diversify may motivate an individual to sell,¹¹² investors seldom need to spend money quickly or make block purchases to diversify.¹¹³ Additionally, because restrictions on short sales make it difficult for informed persons to sell on bad news, informed traders may be more likely to buy than to sell.¹¹⁴ Market participants may also expect security owners to be impatient to realize their profits, and thus the market may not read sales made after an increase in a security's price to indicate that the seller knows of impending bad news.¹¹⁵ Finally, very large purchases may hint of a takeover of the issuer, thus foreshadowing an imminent and substantial

of informational change."); Jennifer Conrad & Cathy M. Niden, *Order Flow, Trading Costs and Corporate Acquisition Announcements*, 21 FIN. MGMT. 22, 23 (1992) (volume is high but trades are not large before acquisition announcements); Macey & Kanda, *supra* note 18, at 1016 (suggesting that the Exchange Act's requirement that large buyers disclose the size of their investments effectively reveals the information they have acquired); Meulbroek, *supra* note 104, at 1691-96 (volume is high on days that insiders trade illegally, but insiders' trading is only a small part of total volume on those days). While large trades seem to convey information, the size of a large trade may not be directly correlated with the amount of information it is thought to convey. Compare Scholes, *supra* note 36 (no correlation), with Hasbrouck, *supra* note 38 (correlation exists).

A trade need not be large to change the market's collective judgment of value. Cf. Meulbroek, *supra* note 104, at 1691-96 (discussing market's response to relatively small insider trades). Indeed, if the trading plans of a person thought to be well informed become widely known, price may change even before she trades. See Pettway & Radcliffe, *supra* note 43, at 19 (price changes around announcement of new issue); see also Scholes, *supra* note 36 (price corrections after traders' identities are revealed).

¹¹⁰ Cf. Grossman, *supra* note 57, at 522-23 (discussing limits of arbitrage between upstairs and downstairs markets).

¹¹¹ Purchaser-initiated large transactions tend to have greater permanent effects on price than do seller-initiated transactions. See Holthausen et al., *supra* note 37, at 265; see also Kraus & Stoll, *supra* note 29, at 573-74, suggesting that purchases contain more information than sales. Block positioners that are willing to buy large blocks for inventory are reluctant to sell short to facilitate a purchase. Holthausen et al., *supra* note 37, at 265; Kraus & Stoll, *supra* note 29, at 573-74. This may indicate that block buyers are more likely than sellers to possess non-public information.

¹¹² See Scholes, *supra* note 36, at 200-04.

¹¹³ See Allen & Gorton, *supra* note 19, at 624-25; cf. Kraus & Stoll, *supra* note 29, at 573 (stating that "blocks are sold, not bought").

¹¹⁴ *Id.* at 627-28.

¹¹⁵ Allen & Gale, *supra* note 19, at 519-20.

rise in share price.¹¹⁶ Indeed, given the natural interest of potential sellers in the identity of those who wish to buy large blocks, a would-be manipulator might increase price simply by refusing to reveal his identity when buying a block.¹¹⁷

Trades are more likely to change price if the market overreacts to new information or if market participants evaluate securities on the basis of something other than issuer income. Now maybe the market responds in a systematic way only to information about the value of the income that securities are likely to produce, so that market prices reflect the collective assessment of market participants regarding the present value of that income.¹¹⁸ Yet, "[t]he popular image of the securities markets is one of a noisy crowd easily manipulated by and hypersensitive to rumors and fads."¹¹⁹ There is some support for this image. Citing evidence that market prices overreact to certain events, some economists suggest that market participants focus on something other than the prospects of security issuers, such as the expected reactions of other traders to fads or rumors.¹²⁰ If fads or information unrelated to fundamental values influence market prices in a predictable way, "the correct smart money strategy may well be to jump on the bandwagon, so long as it can be done early enough and the position

116 See Kraus & Stoll, *supra* note 19, at 573-85, 587; Scholes, *supra* note 36, at 184 n.12. Scholes focused on secondary distribution in his early study of the effect of trades on price, in part to exclude the information effect of large purchases. Scholes, *supra* note 36.

117 See Seppi, *supra* note 82; see also Carney, *supra* note 97, at 888-89 n.114 (block traders set price based on the likelihood that they are dealing with informed trader).

118 See, e.g., Easterbrook & Fischel, *supra* note 103, at 1165-68; see also COPELAND & WESTON, *supra* note 93, at 339-43 (discussing rational expectations and market efficiency).

119 Donald C. Langevoort, *Theories, Assumptions, and Securities Regulation: Market Efficiency Revisited*, 140 U. PA. L. REV. 851, 852 (1992).

120 *Id.* at 857-72 (surveying existing literature); see also RICHARD H. THALER, QUASI RATIONAL ECONOMICS 239-300 (1991) (discussing the theory of quasi-rational behavior in the securities market context); Werner F. M. DeBondt & Richard Thaler, *Does the Stock Market Overreact?*, 40 J. FIN. 793 (1985) (discussing the "overreaction hypothesis"); Kenneth A. Froot et al., *Herd on the Street: Informational Inefficiencies in a Market with Short-Term Speculation*, 47 J. FIN. 1461 (1992) (suggesting herding equilibria in which rational market participants focus on information unrelated to fundamental value); *id.* at 1478-81 (discussing other models); Thomas L. Hazen, *Rational Investments, Speculation, or Gambling?—Derivative Securities and Financial Futures and Their Effect on the Underlying Capital Markets*, 86 Nw. U. L. REV. 987, 995-1003 (1992) (discussing "irrational" factors contributing to investor behavior); Kraakman, *supra* note 32, at 899-900 (suggesting that uninformed traders operate on misconceived strategies, fashions and fads); Robert J. Shiller, *Fashions, Fads, and Bubbles in Financial Markets*, in KNIGHTS, RAIDERS, AND TARGETS, *supra* note 32, at 56 (noting that "capricious changes in investor sentiments" influence prices in speculative markets); Robert J. Shiller, Book Review, 47 J. FIN. 2076 (1992) (reviewing RICHARD H. THALER, QUASI RATIONAL ECONOMICS (1991)). But see Josef Lakonishok et al., *The Impact of Institutional Trading on Stock Prices*, 32 J. FIN. ECON. 23 (1992) (suggesting that institutional traders engage in relatively little herding or positive-feedback trading).

liquidated in time."¹²¹ A manipulator might go one step further and make "visible 'irrational' purchases to trigger an overreaction."¹²²

Fischel and Ross doubt that manipulators will be able to use information-conveying trades to change price. Noting again that most trades do not move price, they argue that it is hard to appear informed in an anonymous market.¹²³ Moreover, if the best way to appear informed is to effect large trades, the manipulator who would use trades to cause the market to reevaluate (and reprice) a security might have to put substantial capital at risk to try to move price.

Of course, a would-be manipulator cannot be sure that even large trades will convince the market that he is well informed. Large trades cannot always be counted on to move prices, let alone change perceptions.¹²⁴ However, the fact that many large trades do not change market price does not mean that a manipulator cannot use trades to change perceptions. Recall, once again, that most traders want to get the best price possible and that reported market prices are the product of profit-maximizing traders. Not surprisingly, those who think that their trades may change the market's judgment of a security's value try to disguise their identities, sometimes violating the law in doing so.¹²⁵ Conversely, traders without information have a strong incentive to signal their ignorance before they trade in order to avoid affecting price.¹²⁶

Again, large trades effected at prevailing prices do not show that it is impossible to trade in a way that will influence price, nor do such trades show that market participants are skeptical about the possibility

¹²¹ Langevoort, *supra* note 119, at 870; *see also* Froot et al., *supra* note 120, at 1480 (suggesting that if many traders use chartist models, chartism may be rational even if charts contain no relevant fundamental or long-term information).

¹²² Langevoort, *supra* note 119, at 871 n.62; *see also id.* at 906 ("Much of recent noise theory argues that there can be a contrived run-up in the price of a stock based on hopes and illusions that the smart money either waits out or joins.").

¹²³ Fischel & Ross, *supra* note 8, at 517; *see also id.* at 513.

¹²⁴ *Cf.* Carney, *supra* note 97, at 863 (arguing that few insider trades induce others to trade).

¹²⁵ *See* Albert S. Kyle, *Continuous Auctions and Insider Trading*, 53 *ECONOMETRICA* 1315 (1985) (suggesting that informed traders maximize their profits by using noise trading to camouflage their informed trading); *see also* United States v. Bilzerian, 926 F.2d 1285 (2d Cir. 1991) (stock parking and secret accumulation), *cert. denied*, 112 S. Ct. 63 (1991); Carney, *supra* note 97, at 874-75 (discussing insider trading and bids for corporate control); Meulbroek, *supra* note 104, at 1662-63 (noting that corporate insiders are not likely to report their violative transactions to the SEC); Thel, *supra* note 17, at 403-04 ("[T]raders who believe that revealing their trading will necessarily reveal information that they possess . . . may try to hide their identities."); *cf.* Levine et al., *supra* note 53, at 51-64 (discussing parking); MICHAEL J. FISHMAN & KATHLEEN HAGERTY, *THE MANDATORY DISCLOSURE OF TRADES AND MARKET LIQUIDITY* (Northwestern University Department of Finance Working Paper No. 107, 1991) (finding that insiders will not voluntarily disclose trades).

¹²⁶ *See* BREALEY & MYERS, *supra* note 22, at 307-08; Scholes, *supra* note 36, at 205; Seppi, *supra* note 82, at 73-75.

that a trader is informed.¹²⁷ On the contrary, one reason people with information expend resources to hide their trades is that they believe their trades will reveal their secrets. Similarly, the perceived information content of trades explains why market professionals devote significant resources to finding out who is trading large blocks and why the trading reports required of insiders by section 16(a) of the Exchange Act are so widely followed.

Market participants will not ascribe any information to a trade if they believe that the trader is either uninformed or a manipulator who is mimicking an informed trader or trying to move prices for some other reason. Ironically then, the more prevalent that manipulation is thought to be, the more difficult it is to accomplish. Fischel and Ross do not mention this barrier to manipulation, perhaps because it works only if market participants believe that manipulation is possible. Fischel and Ross may not believe in manipulation, but some market participants do,¹²⁸ and this creates a problem for manipulators, especially in situations that present obvious opportunities for manipulation. Fortunately for the manipulators, however, market participants also believe that many traders possess nonpublic information, and manipulation is possible so long as market participants are not sure whether trading is informed or manipulative.¹²⁹

Although trades can be used to get other market participants to reevaluate securities, manipulators will be reluctant to risk their capital on manipulative trades when there is no guarantee that their trading will have the desired effect. However, manipulators may be able to move price with very little exposure by using so-called fictitious transactions. Wash sales, in which the same party is buyer and seller, and matched orders, in which confederates simultaneously enter offsetting purchase and sale orders, are supposed to be standard manipulative tools. For example, manipulators use these tools to create a record of rising prices that suggests that informed interests are buying.¹³⁰

¹²⁷ Moreover, the perceived informational content of large trades may be higher for smaller firms, which are more typically involved in alleged manipulations. See Hasbrouck, *supra* note 38, at 197-200.

¹²⁸ See HOUSE COMM. ON GOVERNMENT OPERATIONS, SHORT-SELLING ACTIVITY IN THE STOCK MARKET: MARKET EFFECTS AND THE NEED FOR REGULATION (PART I); H.R. REP. NO. 414, 102d Cong., 1st Sess. 14 (1991) ("many investors have a perception that short sellers have great manipulative power over stocks"); see also *id.* at 15 (market participants may believe manipulation is more common than it is).

¹²⁹ See Allen & Gale, *supra* note 19, at 514-18; see also Gerard & Nanda, *supra* note 19 (investigating the potential for manipulation due to the interaction between secondary market trading prior to a seasoned offering and the pricing of the offering); Vila, *supra* note 19 (using game theory to present examples of market manipulation); BAGNOLI & LIPMAN, *supra* note 19 (discussing the use of takeover bids to manipulate price).

¹³⁰ See *United States v. Rubenstein*, Litigation Release No. 11,945, 1988 SEC LEXIS 2532 (D. Or. Dec. 20, 1988) (addressing guilty pleas); see also Litigation Release No. 11,973, 1989 SEC LEXIS 165 (Jan. 25, 1989) (complaint of crossed orders outside trading range).

Fischel and Ross seem to recognize that wash sales and matched orders are sometimes used "to mislead market participants into believing that buyers and sellers are trading in a security when in fact no transactions are taking place."¹³¹ This concession is telling, for it acknowledges both that trades can change the market's perception of value, and that a manipulator bent on changing perceptions can use trades to do it.¹³²

The fictitious-trade cases highlight the possibility of manipulation by brokers and market makers. Matched orders and wash sales at successively higher or lower prices cannot change anybody's perception unless the record of the completed transactions is published. If the orders are exposed to the market, however, it may be hard to complete the transactions because the orders may be matched against independent orders at the prevailing price.¹³³ Market makers and brokerage firm employees can avoid this problem by effecting fictitious trades without exposing them to the market first.¹³⁴ Such trades are said to be commonly used by penny-stock brokers who control the entire supply of thinly traded securities and make the whole mar-

prevailing on AMEX); Comment, *supra* note 55, at 626-68; 8 LOSS & SELIGMAN, *supra* note 39, at 3952-58; Fischel & Ross, *supra* note 8, at 536-37; Gilson & Kraakman, *supra* note 29, at 576 n.89; Kryzanowski, *supra* note 55, at 124-26; Lewis D. Lowenfels, *Sections 9(a)(1) and 9(a)(2) of the Securities Exchange Act of 1934: An Analysis of Two Important Anti-Manipulative Provisions*, 85 Nw. U. L. Rev. 698, 698-705 (1991); Thel, *supra* note 7, at 430-31; Thel, *supra* note 17, at 410-11. Penny-stock manipulators are said to employ similar techniques. See Edward J. Mawod & Co. v. SEC, 591 F.2d 588 (10th Cir. 1979); Goldstein et al., *supra* note 53, at 785-86; Lash, *supra* note 53, at 6; Levine et al., *supra* note 53, at 20-21, 35-51.

¹³¹ Fischel & Ross, *supra* note 8, at 510; see also *id.* at 536-37.

¹³² See also Gilson & Kraakman, *supra* note 29, at 576 n.89 (offering the "venerable scam" of fictitious transactions by manipulators as persuasive evidence that market participants look for information in completed trades).

¹³³ In other words, it is impossible to trade at a price above the excess demand function for a security. This proposition is illustrated by the excess demand functions in Figure 1, *supra* note 29, and Figure 2, *supra* note 52. These illustrations also suggest the communicative power of matched orders and wash sales. If market participants understand that traders are price takers, they will assume that reported prices represent demand conditions and that a new price represents a new equilibrium price. Accordingly, a fictitious transaction can (albeit falsely) communicate a substantial change in market expectations.

¹³⁴ See *In re Mercil*, NYSE Hearing Panel Decision ("HPD") 86-99, 1986 WL 178917 (N.Y.S.E.) (Dec. 16, 1986) (specialist entered fictitious trades at the end of the day to increase likely selling price of inventory); see also *In re Nammack*, HPD 86-98, 1986 WL 178916 (N.Y.S.E.) (Dec. 16, 1986) (related case); *In re Blittner*, HPD 82-30, 1982 WL 119035 (N.Y.S.E.) (Apr. 6, 1982) (bond clerk entered matched orders to depress price); *NYMEX Chairman, Others Charged With Trade, Reporting Violations*, 25 Sec. Reg. & L. Rep. 279 (BNA) (Feb. 26, 1993) [hereinafter *NYMEX Chairman*] (Commodity Futures Trading Commission charged exchange member with using wash sales to increase apparent value of positions in order to avoid calls); see also *infra* notes 180-89 and accompanying text.

ket.¹³⁵ Public investors can enlist the assistance of market makers or brokers to effect fictitious trades as well.¹³⁶

II

PROFITING FROM MANIPULATED PRICES

Even if trades can be used to change reported prices, people are unlikely to manipulate prices unless they can profit by doing so. The profits of manipulation may not be easy ones; even if prices can be controlled through trading, manipulation may still be a "sure-to-lose" strategy that will deter itself.¹³⁷

Fischel and Ross argue that manipulation is unlikely to be successful if the manipulator's profits depend on trading at the manipulated price. In a bull manipulation, for example, the manipulator needs to bid the price of the stock up and then sell at the resulting higher price. The difficulty is that the offsetting sales that are essential to the realization of a profit will tend to depress price. If the depressing effect of the offsetting sales is symmetrical with the inflating effect of the initial purchases, there will be no profit. Moreover, the manipulative scheme may prove costly.¹³⁸ Given the poor prospects of moving price by trading and the high cost of trying, the argument goes, manipulation is likely to be self-detering. However, like the argument that prices cannot be controlled in the first place, the argument that profits cannot be made by controlling prices substantially overstates the case.

A. Contracts

Whatever the strength of the argument that manipulation is self-detering, it is limited to cases in which the manipulator's profits are solely derived by effecting offsetting trades at the manipulated price. However, manipulative schemes are often most interesting—and, for the manipulator, most attractive—when the profit comes not from trading at the manipulated price, but from a contract or other ar-

¹³⁵ See Goldstein et al., *supra* note 53; Lash, *supra* note 53; see also Lewis D. Lowenfels & Alan R. Bromberg, *Securities Market Manipulations: An Examination and Analysis of Domination and Control, Frontrunning, and Parking*, 55 ALB. L. REV. 293, 295-312 (1991) (discussing the concept of domination and control of the trading markets).

¹³⁶ See *United States v. Bloom* (E.D. Pa. April 5, 1978), SEC Litigation Release No. 8,402, 1978 SEC LEXIS 1635 (May 3, 1978); Comment, *supra* note 55, at 626-28; see also *infra* notes 180-89 and accompanying text.

¹³⁷ Fischel & Ross, *supra* note 8, at 517-19.

¹³⁸ If it takes large trades to move a price, the manipulator will have to put substantial capital at risk. The manipulator must also bear the liquidity costs of the offsetting trades and pay brokers to handle both the initial and offsetting trades. Fischel & Ross, *supra* note 8, at 512-13, 518-19. However, the manipulator can avoid putting capital at risk by using wash sales or matched orders, and transaction costs can be reduced or eliminated if a broker or market maker participates in the scheme.

rangement that will provide the manipulator with a profit if price moves in a particular direction or reaches a certain level. If a manipulator can benefit from controlling prices without making offsetting trades, manipulation will be profitable even if the price effects of purchases and sales are perfectly symmetrical, so long as the profit made possible by the price change exceeds the costs of the manipulative trades.

Contractual rights and obligations are often tied to reported security prices.¹³⁹ Much wealth is held in the form of securities, and people often enter into contracts designed to maximize or at least realize the value of their securities. Reported market price recommends itself as a measure or proxy for value in such contracts. Securities can generally be bought or sold at reported prices, so in an important sense reported price is the value of a security. Moreover, other approaches to valuation, such as appraisal, are expensive and indeterminate, while reported prices, especially daily closing prices, are precisely articulated and readily available.

When reported prices are used to measure or control rights or obligations in contracts and other relationships, they are a tempting target for manipulation. For example, two of the three recent and well-known manipulation cases that Fischel and Ross discuss at length involved allegations of contract-based manipulation.¹⁴⁰ Fischel and Ross offer these cases as evidence of the increased interest in financial market manipulation. Apparently, they feel that a major social cost of the existing antimanipulation regime is that the much-publicized prosecution of these cases has discouraged appropriate trading. These cases do merit close attention, but not necessarily for the reasons Fischel and Ross suggest.

Michael Milken, the central actor in the best-known securities litigation of recent times, was the subject of one of the Fischel and Ross cases. The United States charged Milken with manipulating the price of the common stock of the Wickes Companies.¹⁴¹ The government dropped this charge when Milken pleaded guilty to other charges, but asked the judge to consider it in connection with his sentencing.¹⁴² The judge eventually decided not to consider the Wickes manipula-

¹³⁹ Cf. 15 U.S.C. § 78b(2) (1988) (congressional finding that the securities markets must be regulated because security prices are used for determining taxes and the value of collateral); Levine et al., *supra* note 53, at 16 (defining price manipulation as controlling price either to induce trades at artificial prices or "to induce other business decisions or behavior").

¹⁴⁰ See Fischel & Ross, *supra* note 8, at 527-34.

¹⁴¹ Indictment, United States v. Milken 55-56 (S.D.N.Y. 1989) (No. 89 Cr. 41); see also Fischel & Ross, *supra* note 8, at 530-32.

¹⁴² Government's Sentencing Memorandum 98-101, United States v. Milken (S.D.N.Y. 1989) (No. 89 Cr. 41); Government's Post-Hearing Memorandum 1-10 (S.D.N.Y. 1989) (No. 89 Cr. 41).

tion charge in her sentencing decision.¹⁴³ Although we do not know what Milken did, he does not appear to have disputed that someone at his firm, Drexel Burnham Lambert, manipulated the price of Wickes stock; he simply denied that he did it.¹⁴⁴ In any event, the circumstances of the case do show that manipulation can sometimes be successful and quite profitable, and that is the reason the case is discussed here.

In 1986, Wickes had over \$200,000,000 of exchangeable preferred stock outstanding, paying a 10% dividend.¹⁴⁵ Wickes wanted to redeem this preferred stock as soon as possible,¹⁴⁶ but could not do so until May 1, 1988, unless the closing price of Wickes common stock equalled or exceeded \$6 1/8 on twenty of thirty consecutive trading days. Milken and Drexel, which was Wickes' investment banker, stood to profit if Wickes redeemed the preferred stock.¹⁴⁷

According to the government, after Wickes common stock had closed at or above the trigger price for nineteen of twenty-eight consecutive trading days, Milken caused Drexel employees to ask Ivan Boesky's firm to buy Wickes common stock for the purpose of causing it to close at or above \$6 1/8 per share.¹⁴⁸ Later that day, Boesky's

¹⁴³ United States v. Milken, 759 F. Supp. 109 (S.D.N.Y. 1990).

¹⁴⁴ See Post-Hearing Memorandum, *supra* note 142, at 4.

¹⁴⁵ This discussion of the allegations relating to the manipulation of Wickes common stock is based on the Indictment, *supra* note 141, the Government's Sentencing Memorandum, *supra* note 142, and the Post-Hearing Memorandum, *supra* note 142. These allegations may be false.

¹⁴⁶ The dividend on the preferred stock was a heavy burden, and Wickes wanted to call the preferred stock as soon as possible. Post-Hearing Memorandum, *supra* note 142, at 2-3. In December 1985, Wickes offered to exchange its common stock for the preferred, but the offer was only moderately successful. Post-Hearing Memorandum, *supra* note 142, at 2. Fischel and Ross cite the fact that Wickes had to pay investment banking fees as evidence that a manipulation designed to trigger a redemption right had a small expected value. Fischel & Ross, *supra* note 8, at 531 n.128. However, Wickes was free to decline to redeem the preferred after the trigger was satisfied. Thus, Wickes' decision to redeem shows that at least Wickes thought redemption would be advantageous.

¹⁴⁷ Drexel stood to receive substantial fees in connection with a redemption. See *infra* note 149 and accompanying text. Milken and Drexel had other reasons to desire a redemption. Wickes was an important client that generated over \$118,000,000 in fees and commissions for Drexel. Post-Hearing Memorandum, *supra* note 142, at 2; see also CONNIE BRUCK, THE PREDATOR'S BALL 292-95 (1989) (stating that Wickes was so central to Milken's business that he would not tolerate losing it as a client). Milken and Drexel wanted to keep the client happy, and the client wanted the preferred stock redeemed. Milken and Drexel stood to reap another, albeit unquantifiable, benefit if the redemption right was triggered, because they would be able to tell potential clients of their success with the Wickes preferred.

¹⁴⁸ According to Fischel and Ross, the government alleged that "Milken . . . asked . . . the Boesky organization . . . to purchase enough Wickes stock to cause it to close at or above 6 1/8 and . . . guaranteed Boesky against loss." Fischel & Ross, *supra* note 8, at 530. In fact, the government alleged that Milken "caused" the Boesky organization to buy. Indictment, *supra* note 141, at 56. As noted in the text, Milken did not dispute the allegation that Drexel initiated a manipulation, but only denied that he had done so himself. Apparently, a lower-level Drexel employee asked Boesky to buy Wickes stock, and the question

firm purchased 1,900,000 shares during the last half-hour of trading, and the price closed at \$6 1/8, entitling Wickes to redeem the preferred stock. Wickes then redeemed the preferred stock, and Drexel earned \$2,300,000 for handling the redemption.¹⁴⁹

Drexel and Milken faced a potentially profitable manipulative opportunity,¹⁵⁰ and if the government's allegations are true the scheme could hardly have been anything else.¹⁵¹ When Boesky began to trade, Wickes common stock was trading at \$6 per share, so only a small increase in price was necessary to trigger the redemption right.

was whether Milken was responsible for the request. *See id.* at 4-10. The Government's Sentencing Memorandum does not identify the person at Drexel who directed the Boesky organization to support the price of Wickes. *See* Sentencing Memorandum, *supra* note 142, at 100.

¹⁴⁹ Indictment, *supra* note 141, at 57.

¹⁵⁰ Fischel and Ross concede that "[o]n one level, the alleged scheme appears plausible." Fischel & Ross, *supra* note 8, at 530. An apologetic popular account of the demise of Drexel and Milken goes even further, concluding that "[t]he logic behind this allegation is compelling." DAN G. STONE, APRIL FOOLS 174 (1990); *see also supra* text accompanying note 144.

¹⁵¹ Fischel and Ross suggest that an innocent explanation of the charges against Milken and Boesky is equally plausible, but there is no innocent explanation if the facts that the government alleged are correct. As Fischel and Ross see it, Milken (or Drexel) might have had Boesky buy simply because they thought Wickes common stock was a good investment. Fischel & Ross, *supra* note 8, at 531. In this version of the story, it is merely a coincidence that Boesky committed over \$11,000,000 to buy 1,900,000 Wickes shares late in the afternoon of a day on which the price of Wickes common stock was down, but on which a higher closing price would lead to a substantial profit for Milken and his firm, who were directing Boesky's trades. That remarkable coincidence aside, it is unlikely that Boesky's purchases looked like a good investment at the time, for, as Fischel and Ross themselves note, "stock returns are usually negative around the announcement of a call." *Id.* at 531 n.127; *see also* Post-Hearing Memorandum, *supra* note 142, at 8 (Drexel's trader expected redemption to depress the stock price). Moreover, Drexel's request and the mechanics of Boesky's purchases are both inconsistent with investment intent. According to the government, Drexel did not ask Boesky to buy a large amount of stock or to buy at the best price; it asked the Boesky organization to move the price up. In any case, if the Boesky organization was trying to make a good investment, presumably it would not have bought a large amount so quickly that it would force price up.

Fischel and Ross also argue that it "is impossible using objective evidence to distinguish between the manipulative and non-manipulative explanations for the trading" in Wickes stock. Fischel & Ross, *supra* note 8, at 531. The intended meaning of this statement is not clear, but whatever it is, the statement requires some qualification. Fischel and Ross may simply be restating their initial position that manipulation is a crime of intent. The question of whether Boesky's purchases of Wickes common stock were manipulative does turn on the subjective state of mind of Boesky, Drexel or Milken, at least according to Fischel and Ross' definition of manipulation. Objective evidence of state of mind is often available, however. People sometimes say what they are thinking or explain why they make requests, and such statements and explanations are fairly good, objective evidence of what those people are thinking. The government claimed to have such evidence in the Milken case, in the form of testimony that Drexel employees asked Boesky employees to bid up the price of Wickes common stock. *See* Sentencing Memorandum, *supra* note 142, at 100; *see also* Post-Hearing Memorandum, *supra* note 142, at 4-5 (noting testimony of Peter Gardiner, a Drexel trader, that while Wickes was trading below \$6 1/8 late in the day, Milken directed his attention to his Quotron and said "Peter, Wickes, 6-1/8," which Gardiner understood to be an instruction to purchase in order to make the stock close at \$6 1/8).

Boesky and any confederates could have expected concerted trading to produce a small price rise. Because only a small rise was to be engineered, Boesky could have been reasonably confident of unwinding his trades without incurring substantial losses. In any case, Drexel stood to earn much more on the redemption than Boesky stood to lose from trading, absent a dramatic fall in the price of Wickes stock.

Fischel and Ross question whether the prospect of investment banking fees would have been a sufficient incentive for Drexel to manipulate the price of Wickes common stock, because "[a]t the time . . . it seemed likely that Drexel would receive these fees soon in any event."¹⁵² They point out that Wickes would have been entitled to redeem the preferred anyway if its common had closed at or above \$6 1/8 on the day Drexel allegedly asked Boesky to trade, or the next day, or on any nine of the next seventeen days, or any twenty of thirty days thereafter. In other words, Milken might have earned the fees from redemption without manipulating the stock.

Wickes was in a hurry to redeem the preferred stock, however. Moreover, Milken might have preferred the certain profits of a redemption triggered by manipulation to profits contingent on the market rising on its own. Wickes common stock was trading below \$6 1/8 late in the day on which Boesky bought, and Drexel's traders were concerned it would close below that price.¹⁵³ As it turned out, Wickes common never did satisfy the conditions of the redemption provision after Boesky traded, so that, leaving aside the wisdom of violating the law, Milken would not have been wise to wait.¹⁵⁴ Wickes presented a profitable opportunity for manipulation, and if Milken and Drexel manipulated the price of Wickes stock, they made a lot of money doing so.

Another case that Fischel and Ross discuss at length is *United States v. Mulheren*.¹⁵⁵ Boesky also figured prominently in *Mulheren*, but this time as the protagonist. In 1985, Boesky acquired approximately 3.4 million shares of Gulf & Western Industries stock, "at the suggestion of his long-time friend, Carl Icahn, a prominent arbitrageur and

¹⁵² Fischel & Ross, *supra* note 8, at 531.

¹⁵³ Post-Hearing Memorandum, *supra* note 142, at 4-5.

¹⁵⁴ See Fischel & Ross, *supra* note 8, at 531. Fischel and Ross suggest that Milken should have been confident that Wickes would be able to redeem the stock in any event because the price of Wickes common stock was likely to rise further, because stocks generally have positive expected returns. See *id.* at 531 n.129. This suggestion seems strained, however, particularly for a volatile stock like Wickes. See also Post-Hearing Memorandum, *supra* note 142, at 3 (arguing that at the time of the alleged manipulation, the price of Wickes common could have been expected to fall if Wickes terminated an announced tender offer).

¹⁵⁵ 938 F.2d 364 (2d Cir. 1991); see Fischel & Ross, *supra* note 8, at 532-33 (discussing *Mulheren*); see also JAMES B. STEWART, DEN OF THIEVES 197-200, 364-65 (1991) (recounting a popularized version of the *Mulheren* facts).

corporate raider," who also had a large position in Gulf & Western stock.¹⁵⁶ Later that year, Boesky proposed taking control of Gulf & Western through a leveraged buyout, but his proposals were repeatedly and emphatically rejected by Martin Davis, the chairman of the company's board of directors.¹⁵⁷ After being rebuffed, Boesky proposed selling his stock back to the company for \$45 per share, which was above the market price. Gulf & Western was engaged in a stock repurchase program at the time,¹⁵⁸ and Davis expressed some interest in Boesky's proposal, but would not agree to pay \$45.¹⁵⁹

After the market closed on October 16, 1985, Boesky telephoned Davis, again offering to sell his stock to the company for \$45 per share. Davis indicated that the company would buy the stock back, but would pay only the market price prevailing at the time of the sale.¹⁶⁰ Gulf & Western had closed that day at \$44 $\frac{3}{4}$. Later that night or early the next morning, Boesky telephoned John Mulheren, a principal of the brokerage firm of Jamie Securities Co. According to the government, Boesky arranged to have Mulheren buy Gulf & Western stock for the purpose of increasing its price. Boesky testified that "Mulheren asked me if I liked the stock . . . I said I liked it; however, I would not pay more than 45 for it and it would be great if it traded at 45." To this, Mulheren responded, "I understand."¹⁶¹

Shortly after 11:00 on the morning of October 17, Jamie Securities ordered 50,000 shares of Gulf & Western at the market through a floor broker. At 11:04 a.m., the broker bought 16,100 shares for \$44 $\frac{3}{4}$ per share and, unable to fill the entire order at that price, bought the rest at \$44 $\frac{7}{8}$ per share between 11:05 and 11:08 a.m. Jamie

¹⁵⁶ 938 F.2d at 366.

¹⁵⁷ *Id.* According to the government, Boesky and Icahn met together with Davis and proposed a leveraged buy out. Brief for the United States at 8, *Mulheren*, (No. 90-1691).

¹⁵⁸ 938 F.2d at 366; *see also* Brief for the United States, *supra* note 157, at 8.

¹⁵⁹ According to the court of appeals, Boesky first proposed to sell his stock to the company for \$45 per share in a meeting with Davis, and Davis indicated that he would consider the purchase but could not immediately agree to a price. 938 F.2d at 366. According to the government, however, Boesky's investment banker proposed the sale to Davis, and reported back to Boesky that the company would buy the stock but only at the market price. Brief for the United States, *supra* note 157, at 8-9. The court of appeals mentions this meeting, but does not say what occurred. Thus, according to the government, by early October, Gulf & Western had indicated that it would buy back the stock at the market price, but Boesky wanted \$45 per share. As the court of appeals recounts the events, however, Boesky had indicated that he would sell at \$45, but the company had not yet decided whether it would repurchase, or if so, at what price.

¹⁶⁰ According to the court of appeals, Davis told Boesky that Gulf & Western would buy the stock, but only at the market price existing at the time of the sale, and instructed Boesky to have his investment banker contact the company's investment banker to arrange the sale. 938 F.2d at 367. According to the government, however, Davis told Boesky that the company would consider buying the stock the following day, but only at the market price. Brief for the United States, *supra* note 157, at 9.

¹⁶¹ 938 F.2d at 367.

then ordered another 25,000 shares at \$45 or less. The floor broker was unable to get any stock at \$44 7/8, and executed the purchase for \$45 at 11:10 a.m. A few minutes later, at 11:17 a.m., Boesky and Icahn sold their stock back to the company at \$45 per share. The stock fell during the afternoon, and Jamie sold its 75,000 shares at the end of the day for a loss of \$64,406.¹⁶²

Mulheren was later indicted for, among other things, purchasing 75,000 shares of Gulf & Western stock for the purpose of raising its price to \$45 per share.¹⁶³ The government argued and—given that Mulheren was convicted—the jury apparently found, that the import of the telephone call between Boesky and Mulheren was that Boesky wanted Mulheren to trade in a way that would move the price of Gulf & Western to \$45 and that Mulheren did as he was asked. The Second Circuit disagreed and reversed Mulheren's conviction, finding that no rational jury could have found guilt beyond a reasonable doubt.¹⁶⁴ The court concluded that the meaning of the cryptic conversation between Boesky and Milken was ambiguous at best, and that Jamie's purchases were just as likely motivated by investment intent as the desire to create a favorable price at which Boesky could sell his block back to Gulf & Western.

Fischel and Ross agree with the Second Circuit's analysis of the facts and with what they take to be the court's suggestion that trading for the purpose of affecting the price of the traded security may not be illegal.¹⁶⁵ As in the case of the Wickes allegations, we do not know why Mulheren had his firm trade. Maybe he thought Gulf & Western was a good investment, or maybe he wanted to move the price up so that Boesky would increase his profits from the sale to Gulf & Western. It is certainly possible that Mulheren was simply trying to profit from what he thought was Boesky's advice. On the other hand, the jury did find that Mulheren bought the stock in order to move its price for Boesky. Perhaps the government did not prove this beyond a reasonable doubt, but its story was not unreasonable. More to the point, for the purpose of this discussion, this was a situation in which manipulation would have been very profitable. That is to say, aside from the risk of legal sanctions, the potential profits of manipulation greatly exceeded the likely costs. Jamie's trades moved the price of

¹⁶² *Id.* at 368.

¹⁶³ *Id.* at 365.

¹⁶⁴ *Id.* at 366; *see also id.* at 368 (explaining government's theory and expressing misgivings).

¹⁶⁵ *See* Fischel & Ross, *supra* note 8, at 533 ("Although the court did not say so explicitly, its analysis calls into question whether actual trades should be prohibited as manipulative."). The court's misgivings may have been directed at the government's argument that failure to disclose an intent to manipulate is a violation of rule 10b-5. *See Mulheren*, 938 F.2d at 368 n.2.

the stock, those trades entailed relatively little risk, and the price change yielded a substantial profit.

Jamie's trades caused the market price of Gulf & Western stock to increase 1/4 point in about six minutes. Fischel and Ross do not suggest that the price would have changed without Jamie's trades, and even the Second Circuit said that Jamie's purchases caused the stock to rise from \$44 3/4 to \$45.¹⁶⁶ When Jamie began to trade, "the market price was holding steady at \$44 3/4."¹⁶⁷ Jamie's broker then bought all of the stock that was available at \$44 3/4 (16,100 shares), all that was available at \$44 7/8 (33,900 shares) and finally 25,000 shares at \$45.

Not only did Jamie's purchases boost the price, Mulheren could have predicted that they would do so. Between the opening of the market at 9:30 a.m. and the time Jamie began to buy, only 32,200 shares of Gulf & Western had traded,¹⁶⁸ and the largest trade during this period was only 5,000 shares.¹⁶⁹ Jamie then ordered 50,000 shares at one time. When Jamie placed its second order a few minutes later, it knew that it had already acquired all that was available at the previous prevailing price, and could have known that it was quickly absorbing the supply immediately available in the market. This second order was for 25,000 shares, and the Gulf & Western specialist testified that at that point a 5,000 share trade "definitely" would have raised the price at least another 1/8 point.¹⁷⁰

If Mulheren was in fact assisting Boesky in a manipulation, it turned out to be a profitable one. Although Jamie lost a total of \$64,406 on its trades,¹⁷¹ Boesky made a much larger profit on the price change those trades occasioned.¹⁷² The 1/4 point rise in the reported price of Gulf & Western between the execution of Jamie's first order and the closing of Boesky's sale of 3.4 million shares to Gulf & Western resulted in Boesky receiving about \$850,000 more than he would have received had Jamie not traded. This figure may in fact understate the profit Boesky stood to realize from moving the price,

¹⁶⁶ 938 F.2d at 368.

¹⁶⁷ *Id.* at 367.

¹⁶⁸ *Id.*

¹⁶⁹ Brief for the United States, *supra* note 157, at 10.

¹⁷⁰ 938 F.2d at 370. The court of appeals suggested that Jamie's purchase of 25,000 shares in its second order, when according to the specialist a 5,000 share purchase would have been sufficient to move the price, was inconsistent with manipulative intent because the large purchase exposed Jamie to more risk than necessary to move the price. *Id.* However, Mulheren would not have known as well as the specialist how much he needed to buy to move the price, and he could hardly have asked his broker to buy only as much as was necessary to move the price. In any event, the risk Jamie accepted when it bought an extra 20,000 shares was greatly outweighed by the profit Boesky was likely to realize.

¹⁷¹ *Id.* at 368.

¹⁷² The court of appeals ignored Boesky's disproportionate profit when it suggested that Jamie's loss was inconsistent with a manipulation charge. *See id.* at 370.

because he might not have been able to sell at all if the price had stayed below \$45. Boesky and Icahn had agreed that \$45 per share was a reasonable price for their stock,¹⁷³ and Boesky might have been embarrassed to sell for less; he might even have felt that he promised Icahn not to do so. The \$850,000 figure certainly understates the total profit that resulted from the price change that Mulheren's trades occasioned, because Icahn sold his stock to the company at the same time Boesky did. Together, Boesky and Icahn realized \$1,678,925 more than they would have if they had sold at the price that prevailed before Mulheren's purchases.¹⁷⁴ Leaving aside the cost of the subsequent litigation, the profit from the price change greatly exceeded the costs associated with the trades that produced it.

Milken and *Mulheren* are prominent examples of recent manipulation schemes, but they are not the only cases in which people are alleged to have used concerted trading to manipulate prices and thus alter contractual rights or obligations.¹⁷⁵ Indeed, in the *Milken* litigation the government alleged that Drexel frequently manipulated prices for the purpose of triggering the contractual rights of clients or firms in which it was otherwise interested.¹⁷⁶

¹⁷³ Brief for the United States, *supra* note 157, at 8.

¹⁷⁴ Boesky and Icahn sold the company a total of 6,715,700 shares. *Mulheren*, 938 F.2d at 368. Boesky never, in fact, suggested that Icahn was involved in the manipulation.

¹⁷⁵ In 1978 a hearing panel of the NYSE found that a specialist had engaged in a manipulative scheme remarkably similar to that alleged in *Mulheren*. See *In re* Fried, HPD 78-82, 1978 WL 22181 (N.Y.S.E.) (Nov. 1, 1978). The specialist that was registered for a stock held 7.9% of the issuer's outstanding stock. The issuer, fearful of a hostile takeover, authorized a repurchase but did not publicly announce the decision. The issuer then agreed to buy most of the specialist's position for \$8 per share. However, a proposed SEC rule required an independent bid or trade at that price before the repurchase could be made, and the stock had not traded at that price for a year. When the stock opened at \$7 1/4 the next morning, the issuer ordered its broker to buy 225,000 shares (equal to most of the block) at \$8, but on the condition that there first be an independent bid or trade at \$8. Over the next two trading days, the specialist was a net buyer. The hearing panel found that the specialist's bids and purchases placed a bottom on the stock's price and helped continue its upward trend. Six minutes after the specialist purchased 100 shares at \$7 3/4, 2,700 shares traded at \$8, and six minutes later the issuer purchased 225,000 shares at \$8, with the specialist selling 215,900 of those shares. The panel found that the specialist had violated NYSE rules by trading for the purpose of influencing the market price.

¹⁷⁶ See Sentencing Memorandum, *supra* note 142, at 97 ("The manipulation of the underlying common stock price to facilitate a convertible securities offering or other corporate event was a frequent occurrence in the High Yield Department throughout the early to mid 1980's, according to at least four former High Yield employees."). The government alleged that Drexel caused Boesky to bid up the price of Stone Container Corporation common stock in order to increase the price at which convertible securities could be sold toward the end, encouraging Stone to proceed with the offering. Lowenfels & Bromberg, *supra* note 135, at 350-51 (discussing the Drexel indictment). The government also alleged that Drexel had caused another entity to depress the price of the C.O.M.B. Co. common stock in order to make it easier for the company to sell convertible securities to the public. *Id.* at 351-54. Although the Stone and C.O.M.B. schemes played upon contractual conversion rights, they would succeed only if the price changes induced the public or the issuer to trade. See *infra* part II.B.

Price manipulations designed to trigger contract rights are not a recent development. On the contrary, they have been cited as a serious problem since the federal securities statutes were first enacted.¹⁷⁷ One of the best-known examples involved the Georgia-Pacific Corporation (G-P). As part of a conglomeration program, G-P bought several businesses and agreed to pay for them with G-P common stock, the exact number of shares in each case to be determined by reference to the closing price of G-P common on the NYSE on particular future dates. According to the Securities & Exchange Commission (SEC), G-P and related entities then bought G-P stock "in a manner which would and did . . . cause the last sale price of G-P common stock on the NYSE to rise in order that G-P's obligation to issue additional shares" under the agreements would be reduced or eliminated.¹⁷⁸ G-P eventually consented to an injunction against "[b]idding for or purchasing any security of G-P for the purpose of creating actual or apparent active trading in or raising the price of any security of G-P."¹⁷⁹

The *Georgia-Pacific* case illustrates only one way that someone whose fortune is tied to the reported price of securities may profit from manipulation. Employees whose positions or compensation are dependent on the price of stock might find manipulation profitable as well.¹⁸⁰ Manipulation is particularly unlikely to be self-detering in this situation, because the employee can use the employer's money to trade and thus will not bear the full loss if the stock eventually returns to its original equilibrium level. This scenario is common among traders employed by securities or brokerage firms. For example, a few years ago a group of brokerage firm employees whose annual bonuses were based on the prices of the securities held in the portfolio that they managed caused the portfolio to buy large quantities of those securities in the final minutes of trading on the day the bonus was to be computed, and the prices rose. When the prices dropped the next trading day, it was the portfolio, not the employees, that suffered the loss. The brokerage firm discovered the scheme and refused to pay the bonuses, but the employees would have profited handsomely from the temporary price spike had they not been discovered.¹⁸¹

¹⁷⁷ See 15 U.S.C. § 78b (1988).

¹⁷⁸ SEC v. Georgia-Pacific Corp., [1964-66 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 91,680, at 95,489 (S.D.N.Y. April 27, 1966).

¹⁷⁹ SEC v. Georgia-Pacific Corp., [1964-66 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 91,692, at 95,525 (S.D.N.Y. May 24, 1966); see 9 LOSS & SELIGMAN, *supra* note 39, at 4060 n.208.

¹⁸⁰ See Fischel & Ross, *supra* note 8, at 523; see also MAYER, *supra* note 79, at 57-59 (asserting that investment funds employ practice of "guaranteeing the close," using concentrated purchases in a few stocks late in the day to enhance reported performance).

¹⁸¹ SEC v. Choset (S.D.N.Y. June 14, 1983), SEC Litigation Release No. 10,036, 1983 SEC LEXIS 1466 (June 15, 1983); *In re* Choset, HPD 83-62, 1983 WL 116065 (N.Y.S.E.)

This scheme illustrates the common practice of "marking the close," in which trading at the very end of the day is used to control reported closing prices. In recent disciplinary proceedings before the SEC,¹⁸² NYSE¹⁸³ and National Association of Securities Dealers (NASD),¹⁸⁴ numerous traders and brokerage firm employees have been found to have marked the close, employing

pattern[s] of actual or deliberate close-of-day trading designed to influence closing share prices of certain stocks. In those instances, traders or salespersons attempted to artificially influence a closing price because of inventory positions in particular securities, margin

(June 2, 1983) (consenting to censure, suspension and fine); *In re* Lepley, HPD 83-63, 1983 WL 116066 (N.Y.S.E.) (June 2, 1983) (consenting to censure, suspension and fine); Richard E. Rustin & Gary Putka, *Merrill Lynch Unit Fires Two Executives in Risk Arbitrage for Violations of Policy*, WALL ST. J., Jan. 21, 1982, at A4.

¹⁸² See, e.g., *In re* Levin, Exchange Act Release No. 31,124, 6 Fed. Sec. L. Rep. (CCH) ¶ 85,046 (Sept. 1, 1992) (accepting settlement of charge that investor marked the close to reduce or avoid margin calls); *In re* Doherty, Exchange Act Release No. 29,545, [1991 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 84,842 (Aug. 12, 1991) (finding that investor, aided by broker, marked the close to reduce or avoid margin calls); *In re* Black, Exchange Act Release No. 28,630, 1990 SEC LEXIS 3624 (Nov. 20, 1990) (affirming N.A.S.D. findings and sanctions after trader admitted entering fictitious trades to enhance apparent performance of portfolio); *In re* E.F. Hutton & Co., Exchange Act Release No. 15,340, 1978 SEC LEXIS 283 (Nov. 17, 1978) (instituting public administrative proceedings on charge that on thirty-five of thirty-seven days customer entered market orders to purchase 100 shares at the close in an attempt to cause the price to close at the ask, thereby minimizing margin calls); see also *NYMEX Chairman*, *supra* note 134 (noting that Commodity Futures Trading Commission charged the chairman of the New York Mercantile Exchange with using wash sales to increase apparent value of positions in order to avoid calls).

¹⁸³ See, e.g., *In re* Beggs, NYSE HPD 89-105, 1989 WL 379964 (Nov. 20, 1989) (marking the close to avoid margin calls); *In re* Jahoda, NYSE HPD 88-45, 1988 WL 360185 (Nov. 2, 1988) (marking the close to reduce unrealized losses in firm account managed by manipulator); *In re* Ross, NYSE HPD 87-13, 1987 WL 225759 (Mar. 10, 1987) (firm with capital problems marked the close to increase the value of the firm's proprietary positions); *In re* Sprague & Nammack, NYSE HPD 86-97, 1986 WL 178915 (Dec. 16, 1986) (by marking the close, specialist firm increased apparent value of its positions and enhanced likelihood of subsequently selling inventory at higher price or covering short positions at lower price); *In re* Ohlandt, NYSE HPD 86-62, 1986 WL 178883 (Sept. 15, 1986) (block position trader marked the close to improve apparent value of firm's inventory); *In re* Sheehy, NYSE HPD 86-63, 1986 WL 178884 (Sept. 15, 1986) (block position trader marked the close to improve apparent value of firm's inventory); *In re* Lunny, NYSE HPD 85-120, 1985 WL 152313 (Oct. 31, 1985) (block trader marked the close to help sales people sell the block at higher price); *In re* Bateman Eichler, Hill Richards, Inc., NYSE HPD 78-12, 1978 WL 22119 (Feb. 23, 1978) (marking the close to enhance margin resources).

¹⁸⁴ See, e.g., *In re* Genovese, Decision in Complaint No. MS-1139 (NASD Market Surveillance Comm., June 22, 1992) (trader marked the close to avoid criticism for losses in portfolio and perhaps to influence bonus based on closing prices); *In re* Weinraub, Decision in Complaint No. MS-1037 (Dec. 18, 1991) (trader solicited customer orders and used them to mark the close at higher price); *In re* Spear, Leeds & Kellogg, Decision in Complaint No. MS-847 (Aug. 3, 1990) (trader admitted marking the close to avoid losing job for losses in portfolio); *In re* Sherwood Securities Corp., Decision in Complaint No. MS-660 (Jan. 18, 1989) (fictitious trades at higher price reported when firm had long proprietary positions, at lower price when firm had short position).

difficulties in personal or customer accounts, or substantial personal or customer holdings in a stock.¹⁸⁵

In marking the close, a manipulator can take advantage of the bid-ask spread to move the closing price a small amount¹⁸⁶—enhancing the apparent value of a long position by ensuring that the last trade is a buy, or enhancing the value of a short position by ensuring that the last trade is a sale. Even a small price move no greater than the bid-ask spread can yield important profits for a manipulator with a large position.¹⁸⁷ The costs may also be low, because a trade of only 100 shares may be sufficient to move price between the bid and ask,¹⁸⁸ and brokerage firm employees can sometimes hold back part of a customer's order and use it at the close.¹⁸⁹

The practice known as "shorting a seasoned offering" is another form of contract-based manipulation.¹⁹⁰ If an issuer or holder of a publicly traded security wants to sell that security in a public offering, it must file a registration statement for the securities and announce that it will sell them at a future date.¹⁹¹ Thereafter, the seller and its underwriters will try to determine the level of buying interest, typically expressed in terms of the number of shares an investor will take at a

¹⁸⁵ *Members Urged to Monitor for "Marking the Close,"* NASD REG. & COMPLIANCE ALERT, Dec. 1992, at 12. The NASD regularly advises its members to take steps to prevent marking the close. See, e.g., *NASD Focuses on Trading Activity at End of the Day*, NASD REG. & COMPLIANCE ALERT, Dec. 1990, at 3-4; *NASD Targets Abusive Late Trade Reporting*, NASD REG. & COMPLIANCE ALERT, Nov. 1989, at 8.

¹⁸⁶ See *supra* notes 72-74 and accompanying text.

¹⁸⁷ See, e.g., *In re Levin*, Exchange Act Release No. 31,124, 6 Fed. Sec. L. Rep. (CCH) ¶ 85,046 (Sept. 1, 1992) (to avoid or reduce margin calls on position of over 400,000 shares of an AMEX-listed stock, investor executed series of purchases at the close, usually causing the price to close 1/8 to 3/8 higher by causing the price to uptick from the bid to the ask); *In re Doherty*, Exchange Act Release No. 29,545, [1991 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 84,842 (Aug. 12, 1991) (similar trades, in which broker knowingly participated). Those who mark the close often do so repeatedly over long periods. See, e.g., *In re E.F. Hutton & Co.*, Exchange Act Release No. 15,340, 1978 SEC LEXIS 283 (Nov. 17, 1978); *In re Beggs*, NYSE HPD 89-105, 1989 WL 379964 (Nov. 20, 1989); *In re Jahoda*, NYSE HPD 88-45, 1988 WL 360185 (Nov. 2, 1988); *In re Ross*, NYSE HPD 87-13, 1987 WL 2257-59 (Mar. 10, 1987); *In re Genovese*, Decision in Complaint No. MS-1139; *In re Sherwood Securities*, Decision in Complaint No. MS-660.

¹⁸⁸ See, e.g., *In re E.F. Hutton & Co.*, 1978 SEC LEXIS 283; *In re Beggs*, 1989 WL 379964; *In re Sprague & Nammack*, 1986 WL 178915; *In re Bateman Eichler, Hill Richards, Inc.*, 1978 WL 22119; *In re Genovese*, Decision in Complaint No. MS-1139.

¹⁸⁹ See, e.g., *In re Beggs*, 1989 WL 379964; *In re Genovese*, Decision in Complaint No. MS-1139; *In re Weinraub*, Decision in Complaint No. MS-1037; see also *In re Bateman Eichler, Hill Richards, Inc.*, 1978 WL 22119 (vice president who marked the close made unauthorized trades in client accounts).

¹⁹⁰ See CHARLES J. JOHNSON, JR., CORPORATE FINANCE AND THE SECURITIES LAWS 198-201 (1990); Thel, *supra* note 17, at 421-22; see also Gerard & Nanda, *supra* note 19 (modeling manipulation by informed traders in the same context).

¹⁹¹ Some holders may be able to sell their securities directly into the market without prior announcement, but the issuer and holders who control the issuer may have to register their securities under the Securities Act before they sell. See 15 U.S.C. §§ 77d(1), 77e (1988); 17 C.F.R. § 230.144 (1992).

particular discount to the market price at the time of sale. The seller will then set the price for the securities—typically after the close of the market the day before the sale—and include that price in the final prospectus.¹⁹² For a variety of reasons, not the least of which is that potential buyers can purchase in the market instead, this selling price is usually set at or below the prevailing market price.¹⁹³

Manipulation may be possible when seasoned offerings are sold at or below reported market price. Just before the price is to be set, a manipulator can sell the stock short with the intent of depressing the reported price and subscribing for part of the offering. If these short sales depress price, the manipulator can cover its short position with shares purchased in the public offering, thereby locking in a profit that is a function of the price decline caused by its short sales.¹⁹⁴ The seller, on the other hand, will sell at a price below that which would have prevailed absent the short selling. The seller can protect itself by abandoning the sale, but in doing so will incur the cost of delay and

¹⁹² See 1 LOSS & SELIGMAN, *supra* note 39, at 317-19, 380-596, 1467-71, 1474-1574. When the securities belong to a class already traded, the registration statement will initially state that the offering price will be set by reference to market price at the time the security is eventually sold. See *id.* at 533 n.52; see also 17 C.F.R. § 230.430 (1992) (preliminary prospectus need not include price information); Gerard & Nanda, *supra* note 19, at 214, 219-21 (discussing institutional practices in pricing secondary offerings); Loderer et al., *supra* note 49, at 38-40 (modeling the pricing of secondary offerings). The issuer will eventually change the registration statement to include the price at which the security is offered; the final prospectus used when the securities are sold must include the selling price. See 17 C.F.R. §§ 230.430, 230.430A (1992).

¹⁹³ See Gerard & Nanda, *supra* note 19, at 213, 220-21, 235 n.21; see also Loderer et al., *supra* note 49, at 42-45 (explaining that seasoned offerings are seldom priced above previous market price, and NASDAQ stocks are more likely to be priced below than are NYSE stocks); Parsons & Raviv, *supra* note 36 (predicting that secondary issue will be priced below previous market price).

¹⁹⁴ In 1988, the SEC adopted a rule prohibiting short sellers from covering their sales in a public offering. 17 C.F.R. § 240.10b-21(T) (1992). The comments submitted to the SEC while the rule was under consideration cite many examples of the practice. See Exchange Act Release No. 26,028, [1988 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 84,315, at 89,386 (Aug. 25, 1988) [hereinafter Exchange Act No. 26,028]; Exchange Act Release No. 24,485, [1987 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 84,127 (May 20, 1987); see also *In re J.A.B. Securities Co., Inc.*, Exchange Act Release No. 15,948, 17 SEC Docket 1086 (June 25, 1979) (citing three such instances); Exchange Act Release No. 34-31,003, 1992 SEC LEXIS 1831, at *25 (Aug. 6, 1992) [hereinafter Exchange Act Release No. 31,003]; H.R. Rep. No. 414, 102d Cong., 1st Sess. 7, 22 (1991); JOHNSON, *supra* note 190, at 199-200 (discussing circumstances surrounding the adoption of Rule 10b-21); Gerard & Nanda, *supra* note 19, at 213-16 (predicting that manipulative selling will occur during seasoned offerings and suggesting that empirical findings are consistent with manipulation of the sort predicted by their model); *id.* at 222 ("The larger the new issue and the smaller the secondary market order flow, the cheaper and the more prevalent is manipulation."); *cf. infra* notes 277-79 and accompanying text (discussing manipulation allegedly designed to counteract shorting).

the expense of the distribution effort. If the seller goes ahead, it will receive less than it would have in an unmanipulated market.¹⁹⁵

Program trading, in which substantial investors trade large packages of securities as part of various investment strategies, may also present opportunities for manipulation. The execution costs of these large trades (consisting of commissions and price changes occasioned by the trades) cannot be predicted with certainty, yet the investors may require certainty for their own ends. Thus, brokers sometimes guarantee these investors a certain price for the entire package of securities. For example, if an investor wants to sell a large package at the end of the day, early in the day its broker might promise the investor the closing price of the package less a discount. When, as in this example, the guaranteed price is a function of a future price level, manipulation is possible: the broker might sell stock at the end of the day to depress closing prices and, accordingly, the amount due the investor.¹⁹⁶

Stock-index futures may also create manipulative opportunities, because they involve contractual rights that are a function of reported market price.¹⁹⁷ The owner of a stock-index future does not get the stocks in the index at expiration, but receives a cash payment based on the reported prices of those stocks at expiration. A manipulator might buy futures and then, on the settlement date, bid up the price of the underlying stocks.¹⁹⁸ The manipulator will receive an inflated settlement, and sell the stock, perhaps at a loss if the effect of the spot purchases dissipates. The scheme will be profitable if the spot market

¹⁹⁵ However, market participants, including the seller, discount for the possibility of foreseeable manipulation. Thus, short-selling affects price less than it would otherwise. Gerard & Nanda, *supra* note 19, at 213-15; *see also infra* notes 276-79 and accompanying text.

¹⁹⁶ *See* JEFFREY D. MILLER ET AL., PROGRAM TRADING: THE NEW AGE OF INVESTING 121-27 (1989); *cf. In re Salomon Bros., Inc.*, NYSE HPD 90-169, 1990 WL 446685 (Dec. 10, 1990) (broker purchased more securities than customer's program required, kept low-priced securities and allocated high-priced securities to customer). Program traders have developed strategies to protect themselves from brokers, which suggests that the problem is a real one. *See infra* note 307 and accompanying text.

¹⁹⁷ *See* Kumar & Seppi, *supra* note 19, at 1487-95; *see also* Thomas A. Levine et al., *Manipulative Practices*, in 3 ALL-ABA POSTGRADUATE COURSE IN FEDERAL SECURITIES LAW 1431 (1990) (discussing capping, pegging and mini-manipulation between options and underlying stock); Wood, *supra* note 19, at 147-48 (describing a "manipulative legging strategy" which "is purportedly one of many similar strategies that can be utilized to temporarily push markets out of equilibrium for gain").

¹⁹⁸ This "manipulation" differs from the so-called manipulative squeeze or corner that typically concerns commodity regulators. *See* Richard D. Friedman, *Stalking the Squeeze: Understanding Commodities Market Manipulation*, 89 MICH. L. REV. 30 (1990); Thel, *supra* note 17, at 432-35. As Fischel and Ross observe, squeezes and corners present a different problem (one of monopoly power). Fischel & Ross, *supra* note 8, at 542-52. While squeezes and corners do not involve trades designed to change price, the abuse of monopoly power may be within the power of the SEC to regulate "manipulative" activities. *See* Thel, *supra* note 17, at 432-35, 437-38; Thel, *supra* note 7, at 431 n.202, 487 n.287.

is less liquid than the futures market and the futures position is larger than the spot position.¹⁹⁹

Thus, contracts in which rights are contingent upon reported security prices create tempting opportunities for manipulation. The Exchange Act itself cites the possibility that manipulation can injure contractual parties as justification for federal control of the securities markets. Contract-based manipulations also figure prominently in Fischel and Ross' discussion of manipulation. Nonetheless, manipulation is not limited to triggering or avoiding contractual obligations.

B. Offsetting Trades

In the schemes just discussed, the manipulator profited merely by moving the reported price of the manipulated security; she did not need to trade at that price. Profit was available because another was obliged or disposed to confer a benefit on the manipulator that was tied to reported price. The securities manipulator of lore, however, is not someone who takes advantage of a contract (although the publicity surrounding the Milken affair may have changed this popular conception). Instead, the manipulator takes control of the market and trades at the manipulated price: bull manipulators pushing price up with purchases and then selling at a profit, bear manipulators pulling price down with short sales and then covering at a profit.

Manipulations that depend on profitable offsetting trades are much more likely to be self-detering than contract-based manipulations—at least in the sense that the manipulator cannot be as confident of success. In addition to moving price, the manipulator whose profits are to arise from trading must trade at the manipulated price. A bull manipulator, for example, must buy in a way that raises price, and then sell at that price. Trading at a manipulated price may be more difficult than moving the price in the first place.²⁰⁰

For a trade-based manipulation to succeed, the initial trades must change the value that other market participants place on the security. If the initial purchases drive up the prevailing price solely because they absorb all the stock held by holders willing to sell at the previously prevailing market price, offsetting trades cannot be made at the resulting price, because no one (other than the manipulator) will buy stock above the previously prevailing price. Anyone who valued the stock at the new price would have already purchased at the previously prevailing lower price.²⁰¹ Moreover, those from whom the manipula-

¹⁹⁹ See Kumar & Seppi, *supra* note 19 (suggesting that manipulation of this sort may be profitable under a wide range of assumptions in futures markets with cash settlement).

²⁰⁰ See Fischel & Ross, *supra* note 8, at 517-19.

²⁰¹ The manipulator's situation is illustrated by the excess demand functions shown in Figure 2, *supra* note 52. When the manipulator enters the market to buy, he shifts the

tor bought may be unwilling to buy back what they sold even at their sale price,²⁰² and if they are willing to buy it back, presumably they will not buy more than they sold. Consequently, if a manipulator boosts prices solely by buying enough stock to shift the price at which buying and selling interests intersect, when he is ready to sell he will not find buyers who will buy for more than he paid.

In addition, trade-based manipulations cannot be based on initial purchases that increase price only because they are effected too quickly to allow offsetting supply to mobilize. Such a price increase will last only until supply responds to the premium price, and the manipulator will not be able to profit even by effecting offsetting trades before the price rebounds. The higher price simply results from the manipulator's purchases, and, like the price created by buying a lot of stock with inelastic supply, reflects only the manipulator's buying interest. Accordingly, the manipulator will find no buyers at the higher price.²⁰³

Thus, offsetting trades cannot be profitable unless the initial trades change the market's valuation of the security. As discussed above, it is possible for trades to alter the market's perceptions; in-

excess demand function from curve D_1 to curve D_2 , and the market-clearing price rises. When the manipulator sells, however, the excess demand function shifts to the left, and the price falls. If no other market participants' preferences have changed in the interim, the price will fall at least to the level maintained before the manipulator began to buy, and may in fact fall further.

Fischel and Ross may actually understate the difficulty of manipulation in this context. They note the high cost of moving price up by taking advantage of inelastic supply, but they fail to mention the difficulty (and perhaps impossibility) of effecting offsetting trades at the resulting price. See Fischel & Ross, *supra* note 8, at 518-19. This omission may reflect their suspicion that trades move price only when they convey information. If a trade changes price by conveying information, price will not immediately revert to its previous level after a change.

²⁰² Sellers may be willing to buy back stock if they initially believed that the intrinsic value of the stock was higher than the market price. See Hal R. Varian, *Divergence of Opinion in Complete Markets*, 40 J. FIN. 309 (1985). Even then, however, their opinions may change after they part with the stock. Moreover, the sellers might have had a high reservation price because of factors no longer relevant after they sold the stock, such as the tax implications or transaction costs of their sales. See Bagwell, *Dutch Auctions*, *supra* note 35, at 81; David T. Brown & Michael D. Ryngaert, *The Determinants of Tendering Rates in Interfirm and Self-Tender Offers*, 65 J. Bus. 529 (1992) (suggesting that capital-gains tax liabilities explain differing reservation prices); Kraakman, *supra* note 32, at 899. Disparate valuation is most likely to present opportunities for manipulation in the market for penny-stocks. In that market, disparate valuation is likely to result from the difficulty that holders face when they try to sell, and it seems unlikely that those holders will be willing to buy again after they sell. See *supra* text accompanying notes 53-55.

²⁰³ The manipulator's problem is illustrated by the excess demand functions in Figure 3, *supra* note 59. If the manipulators's initial trade takes place above the prevailing price, it is because the quickly executed trade takes place at a very short-term equilibrium price. When the manipulator unwinds, the trade will take place at the lower, long-term equilibrium price. If the manipulator unwinds quickly, the trade will take place at the even lower short-term equilibrium price for sales.

deed, the dominant view among financial economists is probably that trades change price only by conveying information.²⁰⁴ Nevertheless, even if the manipulator can change the market's valuation of a security, at least two barriers stand in the way of profiting from offsetting trades. First, the reported price must not change too quickly; the initial trades must convince the market that the manipulator possesses important secrets, but the manipulator must take a position before that change in conviction changes market price.²⁰⁵ Second, the offsetting trades must be effected at the manipulated price. This will be difficult if the offsetting trades convey an impression counter to that conveyed by the initial trades, because that impression will offset the price effect of the first set of trades.²⁰⁶ For example, if the initial set of purchases boost price by conveying the impression that the buyer has good news, the offsetting sales may depress price by giving the impression that the manipulator—now a seller—has bad news. Thus, the manipulator must construct the offsetting sales so that they do not convey offsetting information, or at least so that the offsetting information will not be incorporated into market prices until after the offsetting trades are completed.²⁰⁷

The first task—taking the initial position at the pre-manipulation price—should not be too difficult. The market takes time to incorporate new information into prices;²⁰⁸ it does not translate the information content of trades into price changes instantaneously.²⁰⁹ Prices may respond very quickly to trades that convey information, but even on the NYSE prices do not instantaneously adjust fully to the new information conveyed by trades.²¹⁰ Thus, a manipulator may be able to trade in a way that conveys information, but complete the trade

²⁰⁴ In any case, a price change resulting from immediate trading or inelastic demand may itself change other investors' perceptions. See *supra* part I.B.2.

²⁰⁵ See Fischel & Ross, *supra* note 8, at 517-18 (suggesting the difficulty of taking a position before price changes).

²⁰⁶ See Fischel & Ross, *supra* note 8, at 518.

²⁰⁷ Moreover, if the offsetting sales are large (which is likely if the manipulation is to be worth the trouble) the manipulator may pay immediacy costs to unload quickly, making it even more difficult to profit. See Fischel & Ross, *supra* note 8, at 518-19.

²⁰⁸ See Gilson & Kraakman, *supra* note 29; cf. Harris & Gurel, *supra* note 29, at 816 ("[I]mmediate information about non-information-motivated demand shifts may be costly, and hence . . . short-term demand curves may be less than perfectly elastic."); Hasbrouck, *supra* note 38; Kyle, *supra* note 125 (suggesting that the nonpublic information of informed traders is gradually incorporated into price as trading occurs).

²⁰⁹ See Dann et al., *supra* note 93; Scholes, *supra* note 36, at 207; see also Allen & Gale, *supra* note 19, at 508-09. Delay in market response to the publication of new information is to be expected. The speed of price adjustments is limited by the fact that profit-maximizing participants will trade only if the expected profits of their trades exceed their costs. See Dann et al., *supra* note 93, at 3; Scholes, *supra* note 36, at 207; see also Gilson & Kraakman, *supra* note 29, at 592-626; Kraus & Stoll, *supra* note 29, at 571 n.10.

²¹⁰ Dann et al., *supra* note 93, at 20-21; see also COPELAND & WESTON, *supra* note 93, at 374-75.

before the price changes to fully reflect that information (although if the trade is large, the manipulator may have to pay some premium for trading quickly).²¹¹ In any event, manipulators can avoid the problem by taking a position before entering the initial price-affecting trade.²¹²

The second task—effecting offsetting trades at the manipulated price—may be more difficult. Even if the manipulator takes a position before manipulating the price, offsetting trades will not be profitable if purchases and sales have symmetrical and offsetting effects on the market's perception of value, at least not if those effects lead instantly to a new market price.²¹³ Offsetting trades may not, however, have offsetting effects on price. As noted above, sales may convey less information than purchases,²¹⁴ so that a manipulator may be able to bid price up with purchases and then sell without depressing price.²¹⁵ Moreover, a manipulator may be able to structure the initial trades to maximize their impact on price and the unwinding trades to minimize their impact. Perhaps the impression conveyed by a large initial purchase effected in a way that maximizes its price impact will not be offset by several small sales effected later at prevailing market prices. Alternatively, a manipulator might buy a large block on the exchange, signalling that he is informed by foregoing the upstairs market. The manipulator might then sell the block in the upstairs market, where he can credibly establish that he knows nothing. Purchases and sales are even less likely to have symmetrical effects on price if the market is prone to overreact to new information or if substantial numbers of market participants are preoccupied with trading data rather than fundamental stock value.²¹⁶ For example, a manipulator might push

²¹¹ See Allen & Gale, *supra* note 19, at 507-14 (presenting model in which a successful trade-based manipulator acquires her position in trades that imitate those of an informed investor, leading to an increase in market price); Hasbrouck, *supra* note 38, at 182-85; Kyle, *supra* note 125, at 1315-17. It seems unlikely that the market will fully reflect the informational content of a trade as the trade is executed, given the expense of acquiring and analyzing information. See *supra* note 208 and accompanying text. Presumably the market takes time to respond to new information impounded in trades for the same reasons it takes time to respond to the disequilibrium occasioned by immediate trading.

²¹² In the 1930s, manipulators were thought to begin their operations by acquiring options on large positions. See H.R. REP. NO. 1383, 73d Cong., 2d Sess. 10-11 (1934), reprinted in 5 LEGISLATIVE HISTORY OF THE SECURITIES ACT OF 1933 AND SECURITIES EXCHANGE ACT OF 1934, at Item 18 (J. S. Ellenberger & Ellen P. Mahar eds., 1973) [hereinafter LEGISLATIVE HISTORY]; 8 LOSS & SELIGMAN, *supra* note 39, at 3959-62; Thel, *supra* note 7, at 439. More recently, penny-stock manipulators are said to begin their schemes by acquiring the entire company whose shares they plan to manipulate. See Goldstein et al., *supra* note 53, at 776-78.

²¹³ See Allen & Gorton, *supra* note 19, at 624-28; Gerard & Nanda, *supra* note 19, at 214.

²¹⁴ See *supra* notes 111-17 and accompanying text.

²¹⁵ Allen & Gorton, *supra* note 19, at 624-28.

²¹⁶ See *supra* text accompanying notes 118-22; cf. DeBondt & Thaler, *supra* note 120, at 799-803 (suggesting that positive and negative news do not have symmetrical effects on price).

price to a level that others take as a buy signal, and then sell into the resulting new demand.

As a theoretical matter, then, trade-inducing manipulations are not necessarily self-detering. As a practical matter, however, trading in a way that will induce others to follow suit is undoubtedly difficult. A would-be contract-triggering manipulator knows the upside of the scheme before beginning and does all of the trading that makes the scheme work. A manipulator who wants to cause others to trade, on the other hand, cannot be confident that moving the price will be enough to induce others to trade. Faced with this uncertainty, people who want to trade at a manipulated price have an incentive to lie about the securities that they want to trade. In fact, most people charged with using trades to induce others to trade are charged with making false statements as well.²¹⁷ Perhaps relatively few trade-based manipulations are carried out without false statements,²¹⁸ although there might be more silent manipulations if manipulative trading were permitted.²¹⁹ Nevertheless, trade-induced price movements can lead people to reevaluate securities, and people sometimes trade to cause others to engage in such reevaluation.²²⁰

Offsetting Trades into the Market—The events leading to the collapse of the stock market in 1929 offer at least anecdotal evidence that trades can induce overreaction, and that offsetting trades need not have offsetting effects on price. Although section 2 of the Exchange Act justifies regulation by referring to the way manipulated prices injure people who are not trading, the legislative history emphasizes the activities of manipulative pools.²²¹ According to the conventional conception of how they worked, the pools typically manipulated the stock of companies whose float they could control. After making sure

²¹⁷ See, e.g., Comment, *supra* note 55, at 626-28 (discussing "simplified composite picture" of manipulative pools); see also sources cited *supra* note 53 (discussing false statements and other inappropriate practices used by penny stock manipulators).

²¹⁸ But see Allen & Gale, *supra* note 19, at 521.

²¹⁹ It is not clear what (if any) significance Fischel and Ross would attach to trading in cases in which a person buys a stock while making false positive statements about it and then sells at the resulting higher price. The buyer's state of mind will be at issue if a rule 10b-5 case is brought on the basis of the false statements. See Aaron v. SEC, 446 U.S. 680 (1980); Ernst & Ernst v. Hochfelder, 425 U.S. 185 (1976). A pattern of purchases accompanying the price increase followed by large sales, might suggest that the speaker did not believe that her statements were true. See Booth, *supra* note 20, at 1115 n.207. Attaching evidentiary significance to those trades, however, might undercut the goals that lead Fischel and Ross to conclude that actual trades should not be prohibited regardless of intent.

²²⁰ Cf. Vermaelen, *supra* note 20 (arguing that announced issuer repurchases at premium prices communicate positive information).

²²¹ See SENATE COMM. ON BANKING AND CURRENCY, STOCK EXCHANGE PRACTICES, S. REP. NO. 1455, 73d Cong., 2d Sess. 30-55 (1934), reprinted in 5 LEGISLATIVE HISTORY, *supra* note 212, at item 21; TWENTIETH CENTURY FUND, INC., THE SECURITY MARKETS 563-609 (1935); Fischel & Ross, *supra* note 8, at 503-04, 536-38; Thel, *supra* note 7, at 424-61; Thel, *supra* note 17, at 362-82.

that no large holders would sell into the market, they secured favorable publicity and then bought and sold stock to increase the price and create the illusion of substantial buying interest. After the public began to buy, they then carefully unloaded their positions at a profit.²²² The pool operators found (or at least the supporters of the Exchange Act thought they found) that it was possible to buy in a way that indicated one had information and then sell without revealing the secret. In other words, purchases and sales did not necessarily carry symmetrical information effects.

The pools may be problem of the past, if they were ever really a problem, but recent evidence indicates that trades are sometimes used to cause other market participants to reevaluate and trade securities. In many cases litigated since the Exchange Act was enacted, market operators have been charged with bidding up the price of a stock with conspicuous trades in order to induce others to buy at the resulting inflated price.²²³ More recently, at least one commentator has suggested that the profits reaped from this type of manipulation may help to explain why "[l]arge traders frequently buy and then sell substantial blocks of stock, even though they are apparently not interested in taking over the firms."²²⁴

Trade-based manipulation may prey on investors who rely on the price history of a security in deciding when to trade it. For example, so-called technical analysts often take certain prices to be resistance levels, which, when realized, indicate that the prices will subsequently rise or fall.²²⁵ If a substantial group of traders take the market's achievement of a particular price as a signal to buy, a manipulator could use concentrated trades to move the price to that level, thereby triggering a market reaction that would allow the manipulator to realize a profit by selling a previously acquired position or by selling short. One might object by arguing that trading strategies based on past

²²² See S. REP. NO. 1455, *supra* note 221, at 36-50; Comment, *supra* note 55, at 626-28; see also 8 LOSS & SELIGMAN, *supra* note 39, at 3941-42 (quoting Comment); Fischel & Ross, *supra* note 8, at 536-37 (quoting Comment).

²²³ See SEC v. Resch-Cassin & Co., 362 F. Supp. 964, 976 (S.D.N.Y. 1973) (offering the use of trades to create a "portrait of an active market with a broad base of interested brokers" that attracts buyers); SEC v. Torr, 22 F.Supp. 602, 608 (S.D.N.Y. 1938) ("It is axiomatic that it is the ticker record of a stock that attracts customers."); 8 LOSS & SELIGMAN, *supra* note 39, at 3967-76 (offering proof that prices were manipulated to induce others to trade); Kryzanowski, *supra* note 55, at 125 (suggesting that by actively trading and moving price up, manipulators may be able to entice others to buy at the inflated price); Lowenfels, *supra* note 130, at 702-13 (discussing cases).

²²⁴ Allen & Gale, *supra* note 19, at 521; see also BAGNOLI & LIPMAN, *supra* note 19 (discussing the possibility that takeover bids are sometimes motivated by a desire to increase share price so that the bidder can sell his initial holdings and drop the bid).

²²⁵ BURTON G. MALKIEL, A RANDOM WALK DOWN WALL STREET 113-19 (1990).

prices do not work,²²⁶ but many people nonetheless base their trading decisions on technical analyses of price trends.²²⁷ So long as people treat price changes as trading signals, manipulative trading to set off technical triggers may work.²²⁸ In fact, manipulative schemes of this type are reportedly common in the commodities markets, where formal trading systems are widely used.²²⁹

Negotiated Offsetting Trades—Large transactions and public distributions often are effected in negotiated deals or through a sales force at prices derived from contemporaneously reported prices. An engineered price movement may improve the manipulator's price in such transactions. A person who owns a large amount of a security, for example, might bid up the security's price in the market and then sell the whole block at the market price in a negotiated deal.²³⁰

Manipulations of this sort are possible because the price-setting and market-clearing mechanisms in the trading market and the negotiated deal are different, but participants in the negotiated deal continue to look to reported market prices for an indication of value.²³¹ People will treat the reported market price of a security as a measure of its value—and thus will be willing to trade at the reported price—if they believe that securities can be traded at contemporaneously re-

²²⁶ See COPELAND & WESTON, *supra* note 93, at 349-50; LORIE ET AL., *supra* note 27, at 56-63. But see William Brock et al., *Simple Technical Trading Rules and the Stochastic Properties of Stock Returns*, 47 J. FIN. 1731 (1992) (arguing that trading strategies based on past prices are sometimes successful).

²²⁷ See MALKIEL, *supra* note 225, at 142-51; Brock et al., *supra* note 226, at 1731-32 (discussing the long history of technical analysis and asserting that it is enjoying a renaissance); cf. Froot et al., *supra* note 120, at 1480 (observing that technical trading persists in the face of a consensus that better forecasting methods probably exist and suggesting that this persistence is rational).

²²⁸ See *supra* text accompanying notes 118-22. Limit and stop loss orders, which contemplate trades being made after prices change, also present manipulative opportunities. See SCHWARTZ, *supra* note 18, at 17, 46-49 (describing limit and stop-loss orders).

²²⁹ See Elyse Tanouye, *'Gunning' Plays Can Claim Victims in the Futures Pit*, WALL ST. J., June 17, 1992, at C1 (describing concerted trading designed to trigger stop orders).

²³⁰ This pattern of manipulation is similar to contract-based manipulation, in that the manipulator profits by getting price to rise to a particular level. Here, however, price is manipulated to induce offsetting trades by people who look to reported prices for information or evidence of value, whereas in contract-based manipulations, price is changed to trigger a right to trade under a preexisting contract. See Thel, *supra* note 17, at 418 n.249. The practice of shorting into a public offering, discussed *supra* text accompanying notes 190-95, might be considered trade-based manipulation of the sort discussed here, for the person making the public offering is not obligated to complete the offering. Shorting into the public offering, however, plays on the fact that the offeror is effectively obliged to sell at or below reported price because of the money already sunk into the registration statement and sales effort.

²³¹ See Gerard & Nanda, *supra* note 19, at 214 ("The situation around a [seasoned offering] is special because the price-setting and market-clearing mechanisms in the secondary market and in the [seasoned offering] are very different."); Parsons & Raviv, *supra* note 36, at 378.

ported market prices.²³² Many people do believe, however, that they can trade securities at or near the prevailing price.²³³ They are usually correct too, inasmuch as securities usually can be bought or sold at reported prices²³⁴ (recall that Fischel and Ross' premise is that it is (nearly) impossible to trade at anything but reported prices).

It is probably easier to effect profitable offsetting trades in negotiated transactions or through a sales force than through anonymous sales into the market. If the offsetting transactions in a trade-based manipulation are to be made in the market, the manipulation will not be successful unless the manipulator can actually effect offsetting trades in the market at reported prices. However, if the offsetting trades are to be made in negotiated deals or through a sales force, it will be enough if trading partners believe that trades can be effected on the market at reported prices.

The last of Fischel and Ross' three high profile cases, *United States v. GAF Corp.*,²³⁵ may have involved trading designed to manipulate price to facilitate a negotiated transaction. In October 1986, the GAF Corporation held almost 9.6 million shares of Union Carbide Corporation common stock after an unsuccessful tender offer. The price of Union Carbide stock had been falling for several months, and GAF began to solicit possible buyers for all or part of the block.²³⁶ The GAF executive in charge of the sale, James T. Sherwin, received bids that were slightly below prevailing market prices,²³⁷ and knowledge that GAF's block was available threatened to depress the price of Union Carbide further.²³⁸ In mid October, Sherwin asked the chief executive officer of Jefferies & Co., a firm that specialized in trading large blocks for institutional investors, whether it could make Union Carbide stock close at or above a particular price for several days in a row.²³⁹ The Jefferies executive indicated that it could.²⁴⁰

On October 28, Union Carbide closed at \$21 7/8, and publicly available information suggested that a large amount of Union Carbide

²³² See JAMES D. COX ET AL., *SECURITIES REGULATION* 314 (1991) ("By far the most accurate reflection of a security's value is its price in a free and efficient market.").

²³³ See 15 U.S.C. § 78b(2) (1988). It is noteworthy that broker-dealers often use reported prices to gauge the performance of portfolio managers. See *supra* notes 180-85 and accompanying text.

²³⁴ See *supra* text accompanying notes 23-24.

²³⁵ 928 F.2d 1253 (2d Cir. 1991); see also Fischel & Ross, *supra* note 8, at 527-29 (discussing the *GAF* case).

²³⁶ The fact that GAF was unwilling simply to sell the stock into the market is instructive.

²³⁷ 928 F.2d at 1256.

²³⁸ Brief for the United States at 5, *United States v. GAF Corp.*, 928 F.2d 1253 (2d Cir. 1991) (No. 90-1352).

²³⁹ 928 F.2d at 1256.

²⁴⁰ *Id.*

stock was available for sale below \$22.²⁴¹ On October 29, Sherwin asked the CEO of Jefferies to cause Union Carbide to close at or above \$22 that day, and the executive agreed to do so. Shortly before the NYSE closed for the day, Jefferies' chief trader placed an order to buy 140,000 shares of Union Carbide. Jefferies' broker bought 50,000 shares at \$21 7/8, exhausting the supply available at that price, and then bought several thousand more shares at \$22. The Union Carbide specialist then executed three buy-at-close orders at \$22, which were the last trades of the day on the NYSE. Jefferies then bought 8,000 shares on the Pacific Stock Exchange for \$22,²⁴² which was the consolidated closing price reported in the newspapers.²⁴³

Even though Jefferies' broker acquired only 60,000 of the 140,000 shares that Jefferies ordered on October 29, Jefferies was not in the market the next morning. Union Carbide traded below \$22 until late in the day, when Jefferies again intervened.²⁴⁴ In the last half hour of trading, Jefferies had its broker purchase 27,100 shares at \$21 7/8, then bought 10,000 shares in the last two trades of the day on the NYSE, causing the stock to close at \$22 1/8.²⁴⁵ Jefferies then bought all the Union Carbide shares available on the Pacific Stock Exchange at \$22 1/4, and then another 1,500 shares at \$22 3/8, at which price the stock closed.²⁴⁶ Jefferies sold its Union Carbide shares at a loss on November 3 and 4. GAF sold 5,000,000 shares for \$115 million in a negotiated transaction on November 10.²⁴⁷

The government brought criminal charges to trial three times, arguing that Jefferies' October trades were designed to increase the price of Union Carbide common stock in order to attract buyers and increase GAF's price in a negotiated sale. Fischel and Ross find this interpretation implausible; in fact, they cannot see any clear purpose for the alleged manipulation.²⁴⁸ The third jury, however, apparently accepted the government's argument, convicting both GAF and Sherwin. Maybe juries are unable to understand Wall Street, but Jefferies' trades might indeed have been designed to get a better price for GAF.

As a preliminary matter, Jefferies probably did cause the price of Union Carbide to close higher on October 29 and 30, notwithstanding Fischel and Ross' suggestion that there might be other explana-

²⁴¹ *Id.*; Brief for the United States, *supra* note 238, at 5.

²⁴² 928 F.2d at 1256.

²⁴³ Brief for the United States, *supra* note 238, at 8.

²⁴⁴ 928 F.2d at 1256; Brief for the United States, *supra* note 238, at 10-11.

²⁴⁵ Fischel and Ross state that the NYSE closing price was \$22 7/8. Fischel & Ross, *supra* note 8, at 528.

²⁴⁶ 928 F.2d at 1256; Brief for the United States, *supra* note 238, at 11.

²⁴⁷ Ferrara et al., *supra* note 31, at 211.

²⁴⁸ Fischel & Ross, *supra* note 8, at 529.

tions.²⁴⁹ Had it traded earlier in the day, Jefferies might have effected its purchases at lower prices, and thus, the closing prices might have been lower. According to the court, a substantial amount of stock was thought to be available at less than \$22 while Jefferies was buying.²⁵⁰ Yet on each day, Jefferies did not order until late in the day and its purchases exhausted the supply represented in the market. As a result, its orders had to be completed at prices above the previously prevailing price. On both days, the market closed at those higher prices.²⁵¹

Fischel and Ross insist that the October trades could not have been designed to influence the price that GAF would realize in its sale of Union Carbide stock, because GAF did not sell its Union Carbide stock until November 10, eleven days after the manipulation and several days after Jefferies sold its stock at a loss. As they see it, any purchaser negotiating to buy the Union Carbide stock on November 10 would have considered all recent price changes, so that small changes in the price on October 29 and 30 would not have had any effect on the price GAF received for its shares. Finally, Fischel and Ross conclude that Jefferies' sales on November 3 and 4 "negated any possibility of profit from the alleged scheme, which suggests that there was never a scheme in the first place."²⁵²

However, GAF was trying to sell its stock when Jefferies traded. Thus, the eventual buyer, with which GAF was negotiating when Jefferies traded, may have been influenced by earlier prices when it evaluated the Union Carbide stock.²⁵³ In any event, in trying to figure out whether the October trades were part of a "scheme," the critical inquiry is not what GAF did after Jefferies sold, but what GAF wanted to do when Sherwin asked Jefferies to buy. GAF had an interest in the price of Union Carbide stock on October 29 and 30, and it stood to benefit from a scheme such as the one the government alleged. Even though GAF did not have a contract that allowed it to sell at market price, any buyer in a negotiated block trade would be influenced by

²⁴⁹ See *id.* Fischel and Ross seem to take the position that, if a trade occasions a price change because of liquidity costs or the bid-ask spread, the trade does not cause the price change.

²⁵⁰ GAF, 928 F.2d at 1256.

²⁵¹ In fact, most of Jefferies' October 29 order was not even filled. The price fell during October 30 trading while Jefferies failed to support it. *Id.* See also *In re Melton*, Exchange Act Release No. 28,313, 1990 SEC LEXIS 2817 (Aug. 6, 1990) (Jefferies' trader placed orders so that resulting trades would be the last reported for the day, and bought enough to clear the specialist's book).

²⁵² Fischel & Ross, *supra* note 8, at 529.

²⁵³ See SEC v. GAF Corp. & Sherwin, Litigation Release No. 12,401, 1990 SEC LEXIS 376 (Mar. 8, 1990) (in its civil complaint against GAF and Sherwin, which was settled, the SEC alleged that GAF had begun negotiating with its eventual buyer by October 29).

reported market price.²⁵⁴ Potential buyers would look to the market for information about the likely future of Union Carbide stock, or at least for a sense of what the buyer would get if it decided to resell. By inflating the market price, Jefferies' October trades might have influenced the buyer's thinking.

The market's collective judgment about Union Carbide was in flux when Jefferies traded. The stock had rallied in October, but on October 28 it closed down for the first time since October 7. In those circumstances, the closing price on October 29 was important. Last sale prices are widely reported, and the daily change was likely to shape potential buyers' impressions of the market.²⁵⁵ Moreover, large trades on an uptick might have conveyed an impression that was particularly important to those buyers. GAF might not have been able to convince the market that Union Carbide would have unexpectedly large income. However, by buying large amounts of Union Carbide stock at premium prices, apparently without regard to liquidity costs, Jefferies could have conveyed the impression that substantial traders thought that Union Carbide was a likely takeover candidate.²⁵⁶ Union Carbide had been the subject of a takeover bid, but speculation had diminished when GAF entered into a widely publicized standstill

²⁵⁴ See *id.* (SEC civil complaint alleged that, at the time of the alleged manipulation, GAF was negotiating with buyers whose bids were made in relation to the market price of Union Carbide stock).

²⁵⁵ See, e.g., *In re Sprague & Nammack*, HPD 86-97, 1986 WL 178915 (Dec. 16, 1986) (finding that by marking the close, specialist firm enhanced likely selling price of inventory); *In re Lunny*, HPD 85-120, 1985 WL 152313 (Oct. 31, 1985) (finding that block trader marked the close to help sales people sell block at higher price); cf. *In re Mercil*, HPD 86-99, 1986 WL 178917 (Dec. 16, 1986) (finding that specialist entered fictitious trades at the end of the day to increase likely selling price of inventory); *In re Nammack*, HPD 86-98, 1986 WL 178916 (Dec. 16, 1986) (discussing related circumstances).

²⁵⁶ Cf. Fischel & Ross, *supra* note 8, at 537 (quoting charge that pool operators disseminated false rumors of impending mergers). The importance of takeover rumors at the time of the Jefferies' trades is evidenced by one of the charges to which Milken pleaded guilty, involving the sale of a large block of the stock of MCA, Inc., held by Golden Nugget, Inc., a Drexel client. After Golden Nugget decided to sell the stock, Milken asked Boesky to buy MCA stock in the market, at some point guaranteeing Boesky against any loss upon his resale. Milken pleaded guilty to the charge that the conduct violated section 10(b) and rule 10b-5. In connection with Milken's sentencing, the government argued that the price of MCA would have fallen had the market learned that Golden Nugget was not interested in acquiring MCA, and that Milken had caused the sales to be made through Boesky in order to hide the fact that Golden Nugget was selling. Government's Sentencing Memorandum, *supra* note 142, at 37-41; see also Levine et al., *supra* note 53, at 1533 (maintaining that the purpose of the transaction was to conceal the fact that Golden Nugget was selling and to create the appearance of additional demand). Milken admitted that he had made the guarantee and stated that his purpose was to allow Golden Nugget to get a better price on its sale. He argued that there was nothing wrong with masking Golden Nugget's sales, and suggested that the reason the conduct was illegal was that he failed to cause the Boesky guarantee to be reflected on Drexel's books. Sentencing Memorandum of Michael R. Milken 83-86, *United States v. Milken* (S.D.N.Y. 1989) (No. 89 Cr. 41); Allocation of Michael R. Milken, *United States v. Milken* (S.D.N.Y. 1989) (No. 89 Cr. 41), reprinted in STONE, *supra* note 150, at 201-205.

agreement. Jefferies' large trades might have led the market to believe that arbitrageurs still thought Union Carbide was in play. Substantial purchases effected in the way that these were may change the market's judgment of value and create new buying interest, especially if the market is keyed to respond quickly to takeover speculation. GAF could have expected to profit from that buying interest when it sold its stock.

The fact that Jefferies sold at a loss on November 3 and 4 does not mean that GAF never had reason to expect that the scheme would be profitable. GAF might have expected to close its own sale quickly when Jefferies bought, or at least to complete its sale before Jefferies sold.²⁵⁷ In any case, Jefferies' sales might not have convinced potential buyers of GAF's block that Jefferies' initial purchases did not disclose important positive information about the value of the stock. Potential buyers might have ignored the decline occasioned by Jefferies' sales, and in any case, the decline might have seemed less significant than the price increase. For example, Jefferies structured its initial sales (unlike its purchases) to avoid overwhelming the market.²⁵⁸ Eventually Jefferies dumped its stock, but even those sales may have conveyed little news, since they were effected only after the market began to react adversely to other news about Union Carbide.²⁵⁹

Although GAF might have profited from the scheme that the government alleged, Fischel and Ross suggest that the only evidence of Jefferies' manipulative intent was the timing of its trades and GAF's promise to make up any trading loss Jefferies suffered.²⁶⁰ The timing of the trades is suspicious, but it is hardly the only evidence that the government offered. The government alleged that Sherwin asked Jefferies to raise the price of Union Carbide. Indeed, the defendants never took Fischel and Ross' position that Jefferies' trading was innocent. Although GAF denied that Jefferies had acted on its behalf, it did not deny that Jefferies had manipulated Union Carbide. On the contrary, the defendants conceded that Jefferies had manipulated the stock; they simply argued that Jefferies did so "on its own initiative . . . and for its own purposes."²⁶¹

²⁵⁷ Nor did Jefferies' loss, as opposed to its sale, negate the prospect of a profitable manipulation. If GAF was trying to manipulate Union Carbide stock, it was hoping to profit from its negotiated sale of five or ten million shares. The incremental profit from a small price increase in such a large sale might easily have offset Jefferies' loss on its trades of 100,000 shares.

²⁵⁸ 928 F.2d at 1256.

²⁵⁹ Brief for the United States, *supra* note 238, at 12.

²⁶⁰ Fischel & Ross, *supra* note 8, at 528-29.

²⁶¹ 928 F.2d at 1258, 1262; *id.* at 1266 (Mahoney, J., dissenting); Brief for Defendant at 30, *United States v. GAF Corp.*, 928 F.2d 1253 (2d Cir. 1991) (No. 90-1352). In both criminal and administrative proceedings, Boyd Jefferies, the C.E.O. of Jefferies & Co., admitted

Another recent high-profile manipulation case, *United States v. Regan*,²⁶² involved the manipulation of reported prices for the purpose of inducing a seller to enter into a large transaction, but with the interesting twist of a public sale in the background. In 1985, Drexel was underwriting an offering of convertible debt for C.O.M.B. Co., and believed that the company was bidding up the price of its common stock to get a better price for its convertible debt.²⁶³ Drexel allegedly responded by asking Princeton/Newport Partners, a Drexel client, to sell C.O.M.B. stock in order to drive the price down and offset the C.O.M.B. manipulation. With the stock price lower, Drexel could more easily sell the convertibles.²⁶⁴ In a lucky break for the government, Princeton/Newport recorded the telephone call in which a Drexel trader instructed a Princeton/Newport trader to sell C.O.M.B. stock and promised to cover any losses Princeton/Newport suf-

that he had manipulated the price of Union Carbide stock. Scot J. Paltrow, *Boyd Jefferies in Exile*, L.A. TIMES, July 24, 1989, Pt. IV, at 1.

Jefferies traded Union Carbide again on November 6 and 7, and at trial the defendants argued that the patterns of these trades were identical to those of October 29 and 30. 928 F.2d at 1258. Fischel and Ross cite this argument to support their point that trading at the end of the day is not evidence of manipulative intent. Fischel & Ross, *supra* note 8, at 528 ("Indeed, the defendants pointed out that Jefferies & Co.'s purchases on November 6 and 7, which were not alleged to be part of the manipulative scheme in the government's bill of particulars at the third trial, also occurred at the end of the day."). Fischel and Ross can be read to suggest that the defendants argued—and, more importantly, that the government conceded—that the November trading was not manipulative. Neither is true.

The government's first bill of particulars, filed before the first trial, stated that both the October and November trades were part of the series of manipulative trades alleged in the indictment. 928 F.2d at 1257-58; *see also* Fischel & Ross, *supra* note 8, at 528 n.111. Before the third trial, the government amended the bill of particulars to include only the October trades. 928 F.2d at 1258. The government presumably omitted the November trades because it feared that its failure to prove that both sets of trades were manipulative would prevent it from prevailing on either. *See id.* at 1264-65 (Mahoney, J., dissenting).

Nor did the defendants suggest that the November trades were innocent. On the contrary, they acknowledged that the November trades were unlawful; their "chief contention" was simply that Jefferies was responsible for the trades. *Id.* at 1255. The defendants argued that, because the trading patterns were identical and Jefferies was responsible for the November trades, Jefferies must have been responsible for the October trades. *Id.* at 1258, 1262. Far from denying that the October (and November) trades were manipulative, the defendants argued that Jefferies "had motives to manipulate Union Carbide stock on its own behalf, and in fact did exactly that." *Id.* at 1266 (Mahoney, J., dissenting).

²⁶² 937 F.2d 823 (2d Cir.), *modified*, 946 F.2d 188 (2d Cir. 1991), *cert. denied*, 112 S.Ct. 2273 (1992); *see also* *United States v. Zarzecki*, 24 Sec. Reg. & L. Rep. (BNA) 1482 (S.D.N.Y. Sept. 4, 1992) (No. 88 Cr. 517) (vacating the sentences of two defendants).

²⁶³ 937 F.2d at 829; *see also* Sentencing Memorandum, *supra* note 142, at 108-10. Issuers want the conversion price of convertible securities to be high; that is, they want to give less of their stock in exchange for surrendered convertible securities. Conversely, buyers want the conversion price to be low; in other words, they want to get more stock in return for their surrendered securities. The conversion price is typically set just before the convertible securities are sold to the public. This price is conventionally a function of the closing price of the underlying common stock on the day before the public sale.

²⁶⁴ Lowenfels & Bromberg, *supra* note 135, at 351 (citing Information, *United States v. Drexel Burnham Lambert, Inc.* (S.D.N.Y. Mar. 29, 1989) (No. 89 Cr. 41)).

ferred.²⁶⁵ Princeton/Newport responded by making substantial short sales, driving the price of C.O.M.B. down to the requested level. The C.O.M.B. convertibles were priced on the basis of a lower stock price.²⁶⁶ Drexel subsequently admitted manipulating the price of C.O.M.B. stock;²⁶⁷ the Drexel trader who initiated the trades and the head trader at Princeton/Newport were convicted on criminal charges.²⁶⁸

GAF and *Regan* are not the only recent cases in which the government has plausibly alleged that prices were manipulated with a view toward effecting offsetting transactions at the manipulated market price in negotiated deals or through a sales force. Dealers in penny stocks, for example, set prices in controlled markets and then use high-pressure sales tactics to convince customers to buy at those prices.²⁶⁹ Borrowers who have pledged securities as collateral are often accused of supporting the reported price of the securities in order to convince their creditors that the collateral is valuable, and thus, to discourage them from calling their loans.²⁷⁰ The practice of stabilizing the market while distributing securities may be designed to influence potential purchasers who look to the market for an assurance of value.

Stabilization is a complicated subject, and the practice has long been controversial.²⁷¹ Fischel and Ross find stabilizing trades something of a mystery. Reasoning that there is no need to support the market, and that underwriters probably cannot support prices anyway, they offer the surprising suggestion that stabilizing trades may never

²⁶⁵ *Id.* at 352 (quoting the transcript of the telephone conversation).

²⁶⁶ Sentencing Memorandum, *supra* note 142, at 109-10. Underwriters may employ a similar technique to dispose of sticky offerings. For example, in November 1990, underwriters of a large distribution of Conagra Inc. stock, which was to be offered at the consolidated closing price on November 20, expected the price to close at \$33 and arranged sales at the price. A trade at the end of the day caused the price on the NYSE to close at \$33 3/8. This price would have yielded more money for Conagra, but would have made it more difficult to complete the distribution. The underwriters then arranged a trade at \$33 1/4 on the Pacific Stock Exchange, which closed after the NYSE. As a result, the offering was completed at \$33 1/4. See Laurie P. Cohen, *Shearson, Ex-Stock Trading Co-Chief Settle Alleged Share Manipulation Case*, WALL ST. J., May 19, 1992, at C1; Richard D. Hylton, *Shearson Suspends Officials for Stock Trade Violations*, N.Y. TIMES, Sept. 6, 1991, at D1.

²⁶⁷ See *SEC v. Drexel Burnham Lambert, Inc.* [1989 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 94, 474, at 93,026 (June 20, 1989); Lowenfels & Bromberg, *supra* note 135, at 353.

²⁶⁸ 937 F.2d at 829-30.

²⁶⁹ See sources cited *supra* note 53.

²⁷⁰ See *United States v. Gleave*, Litigation Rel. No. 12024, 1989 SEC LEXIS 466 (D. Utah Mar. 8, 1989) (manipulating price with a view toward pledging stock as collateral); Goldstein et al., *supra* note 53, at 782 (discussing the use of manipulated securities as collateral for loans); *supra* text accompanying notes 180-89.

²⁷¹ See 9 LOSS & SELIGMAN, *supra* note 39, at 3987-4071; COX ET AL., *supra* note 232, at 314; Hanley et al., *supra* note 19, at 194; Nicholas Wolfson, *Rule 10b-6: The Illusory Search for Certainty*, 25 STAN. L. REV. 809, 810 (1973).

occur.²⁷² We may not know what motivates underwriters to stabilize the market during distributions, but it is clear enough that stabilization has not been rare.²⁷³ Potential buyers in underwritten distributions may use reported market prices to measure the value of the distributed security, inasmuch as the market offers both an alternative source for the security and an indication of the price at which they will be able to resell. If buyers are looking to the market, the underwriters have an interest in supporting the market price with trades.²⁷⁴

The SEC requires underwriters who want to stabilize the market to disclose their plans,²⁷⁵ and Fischel and Ross suggest that potential buyers will discount market prices if they know that the market is being stabilized.²⁷⁶ Underwriters apparently sometimes find stabilization worthwhile, however, even when they must disclose it. Potential buyers may rely on the availability of market prices, even when they know that those prices may have been stabilized, so long as they are confident that stabilizing trades cannot hold up the price against a consensus valuation, but can, at most, only offset the temporary price

²⁷² See Fischel & Ross, *supra* note 8, at 538-39; see also *id.* at 534-37.

²⁷³ See Exchange Act Release No. 17,371 [1980 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 82,705, at 83,850 n.17 (Dec. 12, 1980) (Witnesses "testified that stabilization frequently occurs in offerings of equity securities, but almost never in offerings of debt securities."); 9 LOSS & SELIGMAN, *supra* note 39, at 3993 n.19 (noting that between 1939 and 1952, the right to stabilize was reserved in over one-half of registered offerings, and prices were actually stabilized in about 1/6); Hanley et al., *supra* note 19 (arguing on the basis of changes in bid-ask spreads that stabilization is common); Ruud, *supra* note 19 (contending that underwriter stabilization may explain the anomaly of the underpricing of initial public offerings); *id.* at 140 ("Practitioners are reluctant to speak in specific terms about the frequency of IPO stabilization They do acknowledge that it would not be atypical to find that 10-20% of IPO's are stabilized."). The SEC requires that those who effect stabilizing transactions keep records, but it no longer requires reports of stabilization. *Id.* at 3990-91. It is therefore difficult to document how often stabilization is employed. Stabilization may have become less common recently due to improved pricing or innovations such as bought deals. See JENNINGS ET AL., SECURITIES REGULATION: CASES AND MATERIALS 584-85 (1992). Underwriters still want the opportunity to stabilize in some situations, however, as evidenced by the requests that the SEC receives to exempt international offerings from the stabilization rules and the rule changes it has proposed in response. See 9 LOSS & SELIGMAN, *supra* note 39, at 4011-12; Stabilizing to Facilitate a Distribution, Exchange Act Rel. No. 28,732 [1990-91 Transfer Binder] Fed. Sec. L. Rep. ¶ 84,704 (Jan. 3, 1991).

²⁷⁴ Fischel and Ross question the existence of and incentive for stabilization because, they insist, the distribution will not temporarily depress the market price and underwriters cannot bid up the price anyway. Fischel & Ross, *supra* note 8, at 538-39. Once again, however, the evidence that distributions do not have a temporary pressure effect is itself based on distributions in which underwriters have taken steps to dissipate the pressure, perhaps including the step of stabilization.

²⁷⁵ See 17 C.F.R. §§ 240.10b-6, 240.10b-7 (1993).

²⁷⁶ Fischel & Ross, *supra* note 8, at 538. Fischel and Ross' conclusion that stabilization may be rare is all the more remarkable given their argument that the very announcement of a plan to stabilize is likely to drive price down. *Id.* Prospectuses frequently announce that the underwriters reserve the right to stabilize. As Fischel and Ross have it, underwriters depress the market price by making this announcement in order to preserve the right to stabilize, a right that is of little value and one that they do not use anyway.

pressure of the distribution. Perhaps investors are confident of this; they may assume that the SEC rules governing stabilization prevent distortion of the market, or like Fischel and Ross, they may be confident that stabilization cannot prevail against real trading interest.

Nevertheless, Fischel and Ross are probably right when they suggest that supporting the market price while negotiating large distributions is more likely to be profitable if the supporting transactions can be kept secret. Substantial sellers sometimes resort to secret purchases.²⁷⁷ For example, in another of the high-profile cases that Fischel and Ross mention, the principal of a brokerage firm pleaded guilty to criminal charges, agreed to disgorge \$475,000 and consented to the imposition of administrative sanctions in connection with the manipulation of the closing price of a stock. The manipulation occurred on the day that the sale price of 8,000,000 shares of the stock and 8,000,000 warrants to buy the stock was to be set. The principal, who had significant financial ties to the firm selling the stock, was charged with causing the price of the stock to rise 1/8 point by having Jefferies & Co. buy 410,000 shares.²⁷⁸ Admitting that the charges were true, the principal offered the novel explanation that he was merely trying to counter others who were selling the stock in an attempt to depress the price in the public offering.²⁷⁹

Milken and Drexel were also charged with manipulating prices in order to influence the price at which underwritten securities could be sold to the public.²⁸⁰ For example, in March 1986, Stone Container Corporation asked Drexel to manage the distribution of \$200,000,000 of its convertible securities. Stone was reluctant to proceed with the offering until its common stock was trading at \$46, so that the conversion price would be about \$60.²⁸¹ The stock remained below \$46 from early April until April 14, 1986, when Drexel allegedly instructed

²⁷⁷ Cf. James Sterngold, *New-Issue Practices Draw Fire*, N.Y. TIMES, March 23, 1987, at D1 (suggesting that the practice of stabilization is common).

²⁷⁸ See SEC v. Lewis, SEC Litigation Rel. No. 12,569, 1990 SEC LEXIS 2834 (Aug. 6, 1990) (consent decree); *In re Lewis*, Exchange Act Rel. No. 28,333, 1990 SEC LEXIS 2886 (Aug. 13, 1990) (administrative proceedings); Lowenfels & Bromberg, *supra* note 135, at 348-49; William R. McLucas et al., *SEC Enforcement*, 46 BUS. LAW. 797, 812 (1991); Kurt Eichenwald, *Fine and Probation for Lewis in Stock Manipulation Case*, N.Y. TIMES, Dec. 19, 1989, at D1; Stephen Labaton, *A Prominent Trader Admits He Schemed to Rig a Stock Price*, N.Y. TIMES, Aug. 31, 1989, at A1; *Brokerage Firm is Censured*, N.Y. TIMES, Dec. 8, 1989, at D7; see also *United States v. Lewis*, [1989 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 94,479 (S.D.N.Y. June 15, 1989) (criminal proceedings); Fischel & Ross, *supra* note 8, at 505 (mentioning case).

²⁷⁹ See Labaton, *supra* note 278; see also Eichenwald, *supra* note 278.

²⁸⁰ According to the government, on several occasions Milken manipulated the price of common stock down to make it easier to sell derivative securities. See Sentencing Memorandum, *supra* note 142, at 110-11 (alleging that Milken manipulated the common stock price lower in order to reduce the price that would be set for the exercise of warrants, thus facilitating the sale of the warrants).

²⁸¹ See *supra* note 263.

the Boesky organization to buy Stone common, making it clear that the trades were supposed to support or increase the price. The Boesky organization bought a substantial portion of the shares traded that day, and the stock closed at \$46 3/4. Stone agreed to go ahead with the deal and Drexel earned substantial fees.²⁸²

The temptation to manipulate may be particularly acute when the manipulator contemplates the acquisition of an entire company in a single transaction. Around the same time that the SEC accused Georgia-Pacific of boosting its share price with purchases in order to minimize its contractual obligations,²⁸³ the Commission charged Genesco, Inc. with boosting the price of its stock while negotiating the amount of stock that it would give in exchange for businesses that it was acquiring. Genesco denied any wrongdoing, but agreed that it would make subsequent repurchases only under conditions similar to those that Georgia-Pacific had accepted.²⁸⁴

In an interesting variation that occurred a few years later in connection with a takeover contest,²⁸⁵ the Second Circuit found that a rival suitor used price manipulation to defeat the Crane Company's efforts to acquire Westinghouse Air Brake Company. After Crane announced that it would solicit proxies to elect directors to Air Brake's board, the directors of Air Brake decided to support a merger with American Standard, Inc. In response, Crane offered to exchange \$50 face amount of its securities for each share of Air Brake stock tendered. On the day that the offer was to expire, Air Brake opened at \$45 1/4 on the NYSE. During the day, American Standard bought 170,000 shares of Air Brake on the NYSE, and Air Brake eventually

²⁸² This description is based on the SEC's civil complaint against Drexel and Milken, *SEC v. Drexel Burnham Lambert, Inc.*, No. 88 Civ. 6209 (S.D.N.Y. Sept. 7, 1988) (as summarized in SEC Litigation Rel. No. 11,859 [1988-89 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 93,999 at 90,659 [hereinafter *Drexel Litigation Release*]), and the information in *United States v. Drexel Burnham Lambert, Inc.*, (S.D.N.Y. March 29, 1989) (No. 89 Cr. 41) (as summarized in Lowenfels & Bromberg, *supra* note 135, at 350-51), and the Sentencing Memorandum, *supra* note 142, at 94-98.

²⁸³ See *supra* text accompanying notes 177-79.

²⁸⁴ See *Genesco, Inc.*, Prospectus 19-23 (May 10, 1966), reprinted in [1964-66 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 77,354. Genesco was also selling its convertible securities to the public at the same time. *Id.*

Similar allegations were made a few years later in *Davis v. Pennzoil Co.*, 264 A.2d 597 (Pa. 1970). Davis sued Pennzoil to recover compensation for providing Pennzoil's predecessor with a business plan that contemplated Pennzoil's advancing the price of its stock by purchasing its shares in the open market and subsequently using the stock to acquire other businesses. *Id.* at 599-600. The Supreme Court of Pennsylvania held that any promise to pay compensation for the plan was unenforceable because the repurchases that the plan recommended would violate the federal securities laws. *Id.* at 604.

²⁸⁵ See *Crane Co. v. Westinghouse Air Brake Co.*, 419 F.2d 787, 795 (2d Cir. 1969), cert. denied, 400 U.S. 822 (1970); *Crane Co. v. American Standard, Inc.*, 490 F.2d 332 (2d Cir. 1973); *American Standard, Inc. v. Crane Co.*, 510 F.2d 1043 (2d Cir. 1974) cert. denied, 421 U.S. 1000 (1975) (disgorgement under Exchange Act § 16(b)).

reached \$50, with American Standard buying all but 100 of the 26,300 shares that traded at that price.²⁸⁶ Crane's offer appeared less attractive as the market price of Air Brake rose, and the tender offer failed.²⁸⁷ The Second Circuit found that American Standard's extraordinary purchases caused the increase in the price of Air Brake stock and the consequent failure of the Crane tender offer.²⁸⁸ The court also found that American Standard bid up the price of Air Brake stock to frustrate Crane's tender offer.²⁸⁹

More recently, in yet another variation, the SEC charged an acquirer with selling substantial quantities of its target's stock just before commencing a tender offer, thereby depressing the price and making the tender offer more attractive.²⁹⁰ The most notorious use of manipulation to facilitate an acquisition, however, was probably Guinness P.L.C.'s manipulation of its own stock in connection with the \$4 billion takeover of the Distiller's Company, which the New York Times

²⁸⁶ 419 F.2d at 792-93. Before the market opened, Standard agreed to sell 100,000 shares at \$44 1/2 to an institutional investor in an unreported trade. *Id.*

²⁸⁷ *Id.* at 792.

²⁸⁸ *Id.*

²⁸⁹ *Id.* at 792-93; see also Edward C. Schmults & Edmund J. Kelly, *Cash Take-Over Bids—Defense Tactics*, 23 BUS. LAW. 115, 124 (1967) (noting the possibility that issuer repurchases might drive up prices enough to defeat a tender offer). According to the court of appeals,

The net result of [American Standard's purchases] was to represent to the public, whose primary source of information is the tape, that there was a great demand for Air Brake at an increased value. It is reasonable to conclude that many Air Brake stockholders who might otherwise have chosen to tender to Crane chose not to do so because their own holdings in Air Brake looked better as the price went up.

. . . . [On April 19, Standard] sold 120,000 shares at a price of just above \$44 1/2, and purchased 170,000 shares at an average price of \$49.08, for a net trading loss exceeding one-half million dollars. Standard had "painted the tape" in Air Brake stock

Standard's extraordinary buying here, coupled with its large secret sales off the market, inevitably distorted the market picture and deceived public investors, particularly the Air Brake shareholders. The effect of these purchases was to create the appearance of an extraordinary demand for Air Brake stock and a dramatic rise in market price, as a result of which Air Brake shareholders were deterred from tendering to Crane.

419 F.2d at 792-93. The court may have been wrong about American Standard's motives, of course. The court rejected American Standard's argument that it bought large quantities on April 19 because that was the last day it could acquire stock that it would be entitled to vote at the upcoming shareholders' meeting. 419 F.2d at 792 n.9, 795. See also 490 F.2d at 336 n.4. American Standard might also have bid up the price to \$50 as it sought to acquire all the stock anyone might be willing to tender in response to Crane's exchange offer.

²⁹⁰ See SEC v. Zico Investment Holdings, Inc., Litigation Rel. No. 11,617, 1987 SEC LEXIS 3093 (Dec. 2, 1987) (announcing complaint); SEC v. Zico Investment Holdings, Inc., Litigation Rel. No. 11,763, 1988 SEC LEXIS 1205 (June 13, 1988) (announcing consent to injunction and stating that by controlling closing price for four days, the manipulators created the impression in the financial press that the target's price was falling and caused the price to decline for ten days).

called "Britain's biggest financial . . . scandal in decades."²⁹¹ In a heavily contested bid for control of Distiller's, Guinness offered Distiller's shareholders cash and Guinness stock in exchange for their Distiller's stock. After Guinness prevailed, it was revealed that several Guinness executives had arranged for large purchases of Guinness stock in order to increase the reported price, making the Guinness offer appear more attractive to Distiller's shareholders.²⁹² In subsequent criminal prosecutions, no one seemed to deny that Guinness bid up the price of its stock; the chief executive officer of Guinness simply denied knowledge of the scheme, and the people who arranged or made the trades just denied that they knew that their actions were illegal. These defenses were unavailing, and the participants were convicted of various crimes for their roles in the scheme.²⁹³

III

RESPONDING TO MANIPULATION

Contract-based and trade-based manipulation is neither impossible nor self-detering. Plausible economic models indicate that manipulation can be profitable. Manipulative trading may or may not be common, but it is possible and tempting in a variety of significant and common situations. Some, or even most, of the cases discussed above may have innocent explanations, but we cannot be confident that manipulation does not occur.

The exact contours of the manipulation problem are obscure, and this obscurity may be irremediable. The trading techniques used to manipulate prices must be keyed to market structure, as well as trading and contracting practices. Accordingly, manipulative techniques change as those structures and practices evolve, and thus, at any given time, manipulative practices may vary among markets. Aside from being diverse and transitory, the details of common ma-

²⁹¹ Deborah Stead, *Guinness Trial Beginning After Many Legal Delays*, N.Y. TIMES, Feb. 12, 1990, at D12; see also 'Guinness Affair' Shakes British Financial Circles, L.A. TIMES, May 13, 1988, Pt. IV, at 5 (describing the case as the "financial trial of the century").

²⁹² The government charged that Guinness had caused outsiders, including Boesky, to buy Guinness stock, and had paid them fees and promised to hold them harmless against losses arising from their purchases. *The Guinness Affair*, THE ECONOMIST, Sept. 1, 1990, at 72; see also John Jones, Jan. 13, 1987, LEXIS, Nexis Library, UPI File (discussing guarantees that Guinness' investment bankers allegedly made to induce outsiders to boost the price of Guinness stock); Stead, *supra* note 291; 'Guinness Affair' Shakes British Financial Circles, *supra* note 291 (discussing Guinness' investment of \$185 million in a Boesky fund after Boesky bought Guinness shares and Guinness' subsequent efforts to recover \$46 million in payments made to those who bought Guinness stock during the takeover battle); *American Tied to British Fraud Case Arrested*, L.A. TIMES, Oct. 3, 1987, Pt. IV, at 5 (reporting that Guinness wrote off \$205 million for payments and investments relating to illegal actions in the takeover).

²⁹³ *The Guinness Affair*, *supra* note 292, at 72.

nipulative techniques are hard to discover. The success of many manipulative schemes often depends upon the target's ignorance, and often the techniques employed are illegal. Thus, manipulative practices are likely to be disguised, and accordingly, they are hard to study.

While the manipulation problem cannot be deemed nonexistent and ignored, the ambiguity surrounding the problem makes it hard to craft a solution. This ambiguity counsels against incautious legal intervention. I am not sure exactly how the law should respond to manipulation, but the complexity of the problem indicates that the response should not be guided by the flights of legal imagination that the subject of manipulation sometimes inspires.

A. Private Responses

If manipulation is taking place, market participants can be expected to be wary of manipulative practices and respond accordingly. In fact, private actors do recognize and address manipulative trading. Although this reaction suggests that manipulation is not self-detering, it also shows that manipulation can be deterred.

1. *Contractual Precautions*

People who agree to govern themselves by subsequent security prices can, and often do, try to protect themselves from manipulation. The fact that private parties take extensive measures to reduce the risk of manipulation suggests that manipulation really is possible.²⁹⁴ At the same time, private precautions serve as a reminder that the existence of a problem does not necessarily justify government intervention, although perfect contractual protection is no more possible here than elsewhere.²⁹⁵

Those who structure their contractual relationships on the basis of reported market prices can take a number of steps to reduce the risk that a party will manipulate market price. They might simply agree that no party will trade in a way that will influence market price, and in fact this may be an implicit term or legal norm incorporated into any contract that turns on market price.²⁹⁶ Even if the parties are prepared to agree to forego trading, however, a contractual prohibi-

²⁹⁴ Even Fischel and Ross acknowledge that contracting parties are concerned about the possibility of manipulation. See Fischel & Ross, *supra* note 8, at 532 n.130 (The Wickes "preferred stock indenture was designed to make . . . manipulations highly unlikely.").

²⁹⁵ See Fischel & Ross, *supra* note 8, at 525.

²⁹⁶ See RESTATEMENT (SECOND) OF CONTRACTS §§ 225, 245 (1981); Fischel & Ross, *supra* note 8, at 523-24; cf. *In re Sheehy*, HPD 86-63, 1986 WL 178884 (Sept. 15, 1986) (firm withheld bonus from employee who marked close to influence apparent value of portfolio); *In re Genovese*, Decision in Complaint No. MS-1139 (NASD Market Surveillance Comm. June 22, 1992) (firm terminated trader who marked the close); Rustin & Putka, *supra* note 181 (discussing the termination of employees who marked the close to increase bonus).

tion is an incomplete solution for at least two reasons. First, a party may be able to trade in violation of the agreement without being discovered.²⁹⁷ The parties might address the difficulty of monitoring compliance by providing a substantial sanction in the event of discovery, but courts would likely treat such a provision as a punitive damage clause and refuse to enforce it.²⁹⁸

Second, even if the parties can somehow prevent each other from trading, their rights and obligations may be determined by price aberrations caused by other people's trading.²⁹⁹ Consider the undisputed facts of *United States v. Mulheren*.³⁰⁰ Gulf & Western repurchased Carl Icahn's stock at the same time it bought Boesky's. Had Gulf & Western bought Icahn's shares at the price that would have prevailed if Mulheren had not traded, it would have paid Icahn about \$800,000 less.³⁰¹ Icahn reaped—and Gulf & Western paid—an extra \$800,000 as a result of Mulheren's trades, regardless of whether Icahn had anything to do with Mulheren's trades, and indeed even if Mulheren traded innocently.

Icahn was probably entitled to receive the manipulated price for his stock because the contract seemed to allocate to Gulf & Western the risk of a price spike occasioned by trading like Mulheren's. The problem, however, is that the risk of disruptive trading is one the parties would rather not have to allocate. People usually tie contractual rights and obligations to reported market prices because they are concerned with the price at which securities can be traded and they believe that securities can be traded at reported prices. Whenever trades result in reported prices that do not indicate the price at which trades can be made, the market's value as a price discovery mechanism is compromised.³⁰² To the extent that reported prices may deviate from

²⁹⁷ See, e.g., *supra* text accompanying notes 148-49, 160-62 (discussing allegations of trading through another). The allegation that Milken traded through Boesky is particularly revealing in this respect, for, according to Fischel and Ross, the indenture for the Wickes preferred stock "was designed to make such manipulations highly unlikely." Fischel & Ross, *supra* note 8, at 532 n.130.

²⁹⁸ See RESTATEMENT (SECOND) OF CONTRACTS § 356(1) (1981); U.C.C. § 2-718(1) (1990); E. ALLAN FARNSWORTH, FARNSWORTH ON CONTRACTS § 12.18 (1990).

²⁹⁹ See, e.g., *In re Doherty*, Exchange Act Release No. 29,545 [1991 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 84,842 (Aug. 12, 1991) (noting that marking the close has repercussions for indexes and margin credit); H.R. REP. NO. 414, 102d Cong., 1st Sess. 22 (1991) (price declines due to short sales can trigger margin calls); cf. Floyd Norris, *Salomon's Error Went Right to Floor*, N.Y. TIMES, Mar. 27, 1992, at D1 (explaining how at the close of the market, brokerage clerk erroneously entered order to sell \$11,000,000 of stock as order to sell 11,000,000 shares, precipitating a price drop).

³⁰⁰ 938 F.2d 364 (2d Cir. 1991); see *supra* text accompanying notes 155-74.

³⁰¹ See *supra* notes 171-74 and accompanying text. As noted above, however, it is not clear that Gulf & Western in fact had contracts with Boesky and Icahn. See *supra* notes 159-60.

³⁰² The importance of reported prices for price discovery is the subject of a growing literature. See SCHWARTZ, *supra* note 18, at 514-28; Schreiber & Schwartz, *supra* note 51, at

market value—because of the trading of parties or strangers to the contract—they are unsuitable as contractual proxies for available price.

Contracting parties can sometimes address both the possibility of manipulation and the risk of independent disruptive trading by changing the contractual trigger from the reported price at a particular time to the average or sustained price over a period of time.³⁰³ For example, Wickes was allowed to redeem its preferred stock only if its common stock closed at or above \$6 1/8 for 20 of 30 consecutive trading days. An extended trigger period like this makes manipulation more difficult and temporary price aberrations less important. It does not, however, make manipulation impossible, as *Milken* demonstrates.³⁰⁴ Moreover, a contractual trigger can be extended only so far. An extreme term, such as one requiring that the price remain above a certain level for a long period,³⁰⁵ simply shifts the risk of disruptive trading. It also creates the possibility that the other party will be able to avoid its obligations by manipulating price.

The technique of extending the contractual trigger is a less effective response to manipulation and disruptive trading in other contexts. It does not work as well when parties use reported price to set the amount of a payment, rather than to trigger the payment of a certain sum. For example, if a corporation is to compute an officer's bonus on the basis of the reported price of the corporation's stock, it cannot eliminate the risk of manipulation and disruptive trading by making the bonus a function of the average price over an extended period of time. Disruptive trading by strangers or manipulation of the price by the parties themselves during part of the period will still influence the market bonus, albeit to a lesser extent than they would if the bonus were based on a single closing price. An extended contractual reference period may be entirely unsuitable when the contract is to trade at the reported price in the future. For example, a program trader who must sell a basket of stocks at the closing price wants to be

23-27. Legal scholars have so widely accepted the proposition that reported prices ought to reflect contemporary equilibrium market value that they generally ignore it in discussing the importance and achievement of stock market efficiency.

³⁰³ See Fischel & Ross, *supra* note 8, at 524-25.

³⁰⁴ Nonetheless, it is much more difficult to manipulate prices for twenty to thirty days than for one day in thirty. Thus, even if a contract like that involved in the Wickes case is manipulated, the manipulation is unlikely to trigger an event except when the parties could probably trade in the market at or near the trigger price, which is presumably the point of the contract. Slight manipulation might even be thought appropriate on the theory that it mitigates the all-or-nothing quality of the triggered condition.

³⁰⁵ See Fischel & Ross, *supra* note 8, at 524-25 (suggesting that a firm concerned about manipulation could condition a bonus on share price remaining above the trigger price for a certain period).

promised the closing price for that day, not the average closing price over several days.³⁰⁶

The parties may find other ways to structure their affairs so as to reduce the risk of manipulation. For example, program traders who pay their brokers for the promise of the closing price for a package of securities can protect themselves from broker manipulation of the closing price by refusing to describe the package of securities precisely. They may reserve the right to deliver one of several packages or contractually describe the package so that the specific securities to be delivered cannot be determined before delivery. The broker cannot easily manipulate the closing prices because it does not know what stocks it will have to buy.³⁰⁷ These strategies, however, also leave the broker unsure of exactly what risk it has assumed, and the premium price that the trader must pay to get the broker to accept this uncertainty is a cost of the possibility of manipulation.

Notably, all of these strategies for dealing with manipulation and disruptive trading in the context of contracts tied to reported market prices have evolved over time. Even contracting parties who recognize that manipulation is possible cannot protect themselves against all forms of manipulation.³⁰⁸ Because even sophisticated market participants sometimes fail to protect themselves against manipulation, it would seem that public investors are particularly unlikely to take contractual precautions. Investment bankers may attend to the interests of public investors, but they have mixed motives. For example, even if Milken and Drexel Burnham did nothing wrong in connection with the Wickes redemption, the prospect of future investment banking fees from Wickes may have tempered their incentive to bargain hard for a contract that would have protected the buyers of the preferred stock.³⁰⁹ Similarly, when a public corporation is the target of contract-

³⁰⁶ See *supra* text accompanying note 196. An extended reference period will not prevent manipulative shorting into a public offering or marking the close to prevent a margin call. See *supra* notes 180-95 and accompanying text.

³⁰⁷ See MILLER ET AL., *supra* note 196, at 121-24; see also *id.* at 126 ("The program trading relationship between broker and money-manager client begins to resemble an exotic dance.").

³⁰⁸ Cf. Fischel & Ross, *supra* note 8, at 532 n.130 ("At the time the [Wickes] indenture was written no one would have expected the price of the stock on any one day to matter."). Note that brokerage firms frequently use closing prices rather than the less-manipulable midpoint of the bid-ask spread to evaluate employees and to calculate margin calls. See *supra* text accompanying notes 180-89.

³⁰⁹ Of course, the price at which securities are first sold to the public may reflect the possibility of manipulation. Cf. Allan C. Eberhart & Richard J. Sweeney, *Does the Bond Market Predict Bankruptcy Settlements?*, 47 J. FIN. 943 (1992) (violations of the absolute priority rule, which are common but small, are fairly well predicted in market prices for bonds around the bankruptcy announcement date). However, there is reason to question whether initial sale prices respond to such possibilities. See Victor Brudney, *Corporate Bondholders and Debtor Opportunism: In Bad Times and Good*, 105 HARV. L. REV. 1821, 1825-27, 1849-52 (1992) (questioning the assumption that the market price of debt instruments

based manipulation, management may have insufficient incentive to protect public shareholders. For example, when Gulf & Western agreed to repurchase well over \$300,000,000 of its stock from Boesky and Icahn, it apparently did little to protect itself from manipulation or the risk that a small, temporary price change would cause it to spend millions of dollars extra. Indeed, the management of Gulf & Western might have been tempted to permit manipulation of its stock so that it could pay a premium price without appearing to pay greenmail.

Although contracting parties can reduce the possibility of manipulation and the effect of disruptive trading by unrelated parties, they cannot completely eliminate the problems by themselves.³¹⁰

2. *Trader Reactions*

Traders who look to reported price for an indication of value and to reported trades for information also have an interest in protecting themselves from manipulation. As a precaution, traders may develop a skepticism of reported prices, especially in situations where manipulation is likely. Moreover, other traders have an incentive to search for manipulation, because they can profit by taking advantage of manipulative trades. Consider, for example, the way that the market will react to trading around the time a secondary offering is being priced.

When outsiders learn that a holder or issuer is about to sell a large quantity of a publicly traded security, they may be tempted to depress the market price for the purpose of lowering the offering price.³¹¹ Sellers who suspect such manipulation can try to convince potential buyers that the reported price has been manipulated. More importantly, investors who suspect that manipulation is occurring will bid in the market and in the secondary offering in an attempt to obtain bargain prices. This bidding will work against the manipulator's sales, making it more difficult to depress price.³¹²

Investor skepticism about market prices is not likely to prevent all manipulation, however. So long as investors cannot be sure whether

discounts for the possibility of debtor opportunism); see also Allan C. Eberhart, *Chapter 11—Surprisingly Good for Shareholders*, WALL ST. J., Mar. 26, 1992, at A14 (noting that it is virtually impossible to test whether the original issue price of debt is discounted for future violations of the absolute priority rule).

³¹⁰ Because parties cannot construct a perfect contractual response to manipulation, Fischel and Ross concede that there may be some benefit to a legal prohibition of manipulation, although they suggest that such benefit may be trivial. Fischel & Ross, *supra* note 8, at 524-25.

³¹¹ See Gerard & Nanda, *supra* note 19, at 220-21; see also *supra* text accompanying notes 190-95.

³¹² The seller cannot offset the manipulative trading, however, because of rules against buying during a distribution. See 17 C.F.R. § 240.10b-6 (1992); see also text accompanying notes 269-72.

reported trades are the product of informed trading or manipulation, manipulation may be profitable.³¹³ Moreover, investor skepticism provides no check at all when the market fails to recognize a manipulative opportunity. Market participants are likely to underestimate the potential for manipulation when off-market transactions are being effected at market price or when contracts are tied to reported prices. The opportunities for manipulation in these circumstances arise not from the dynamics of the market, but from exogenous circumstances; market participants who are unaware of these contracts or transactions will not be on the alert for manipulation. Those involved in the transaction have reason to be careful, but they may not fully comprehend that market prices are susceptible to manipulation. Once again, it is instructive to note that contractual precautions against manipulation have evolved in response to the development and employment of unforeseen manipulative techniques. Consider once again the facts of *Mulheren*. Although it is not clear that Gulf & Western and Boesky had an enforceable agreement,³¹⁴ Gulf & Western nevertheless paid the reported price for a tremendous quantity of its stock just after the price had jumped 1/4 point. Although the sellers had the incentive and wherewithal to manipulate the price of the stock, the buyer showed no skepticism at all.

Investor skepticism is a significant check on manipulation, but it is unlikely to prevent all trade-based manipulation. Even when it works, investor skepticism may be excessively costly. Skeptical investors have to investigate and put their capital at risk. Duplicative investigation by many market participants may be wasteful. In fact, the disclosure requirements of the federal securities laws are often justified with the argument that they reduce the cost of investigation by skeptical investors. Perhaps the prevention of manipulation is also a public good that ought to be provided by a centralized agency that can efficiently investigate and address the problem.

3. *Market Reform*

The market itself can be structured to reduce manipulation. The prices reported from a market depend very much on the way that securities are traded in that market. Thus, different markets are likely to be more or less susceptible to different forms of manipulation. Those who operate the markets can arrange them so that manipulation is difficult.

Reported prices are one of the most important products of financial markets, and providers of market services have an interest in en-

³¹³ See Allen & Gale, *supra* note 19, at 509; Gerard & Nanda, *supra* note 19, at 220-22; BAGNOLI & LIPMAN, *supra* note 19, at 1-5.

³¹⁴ See *supra* notes 159-60.

sureing that reported prices reflect the price at which trades can be made.³¹⁵ To the extent that traders and issuers are worried about manipulation, they will turn to markets that minimize the problem. As competition for listings and trading increases among securities markets, those who provide market services may find it worthwhile to perfect and offer measures that will protect the pricing process and discourage manipulation.³¹⁶

The organized securities markets have taken many measures against manipulation,³¹⁷ and the NASD's recent initiative on short selling suggests that markets may act against manipulation in response to competitive pressure. SEC rule 10a-1 prohibits short sales of exchange-listed stocks except on or after an uptick; that is, short sales of exchange-listed stocks must be made at a price above the last different price.³¹⁸ The uptick rule does not apply to stocks that are traded on the NASDAQ and not listed on an exchange. Many NASDAQ issuers want the protection of an uptick rule, however, and thus, they might list on an exchange that provides such a safety measure.³¹⁹ In response, the governors and members of the NASD approved an uptick rule for NASDAQ.³²⁰ When the NASD filed the proposed rule with the SEC, it discussed both sides of the short-sale debate.³²¹ The ulti-

³¹⁵ See Mulherin et al., *supra* note 18; Van Zandt, *supra* note 18.

³¹⁶ See Baker & Edelman, *supra* note 62, at 71 (surveying literature on issuer choices of trading market and concluding that issuers transfer listings from the AMEX to the NYSE when the latter offers liquidity benefits); Cowan et al., *supra* note 62 (surveying literature on issuer choices of trading market and concluding that firms move from NASDAQ to the NYSE for liquidity); Cox & Michael, *supra* note 60, at 842-43 (detailing the use of linked markets to preserve liquidity); Macey & Kanda, *supra* note 18, at 1014-16 (describing competition among stock markets); David M. Schizer, Note, *Benign Restraint: The SEC's Regulation of Execution Systems*, 101 YALE L.J. 1551 (1992) (arguing that competition among markets will yield the best mix of systems for executing trades); cf. Jerry W. Markham, *The Commodity Exchange Monopoly—Reform is Needed*, 48 WASH. & LEE L. REV. 977 (1991) (concluding that trading abuses would decline if exchanges were permitted to compete in trading particular contracts).

³¹⁷ See *supra* note 6. Of course, these rules and procedures may have been adopted in response to pressure from government regulators or market professionals pursuing their own interests rather than the demands of consumers of market services. See Thel, *supra* note 7, at 436-37 (discussing stock exchange rules against manipulative practices in place before 1934); Myerson, *supra* note 67, at D1 (explaining NYSE adoption of rules to limit volatility upon expiration of futures contracts in order to keep investors from leaving the market); see also Hazen, *supra* note 120, at 1012-13, 1031-32 (describing NYSE responses to volatility).

³¹⁸ 17 C.F.R. § 240.10a-1 (1992); see Ralph S. Janvey, *Short Selling* 20 SEC. REG. L.J. 270, 277 (1992); Macey et al., *supra* note 31, at 805-08.

³¹⁹ See H.R. REP. NO. 414, 102d Cong., 1st Sess. 8-9 (1991); Exchange Act Release No. 31,003, *supra* note 194, at 6 (hundreds of issuers submitted short form responses favoring a short-sale rule for NASDAQ); *id.* at 25 (investment bankers may recommend exchange listing due to the lack of NASDAQ short-sale regulation); JENNINGS ET AL., *supra* note 273, at 583 (issuers have defected from NASDAQ to get protection of uptick rule); Janvey, *supra* note 318, at 277.

³²⁰ Exchange Act Release No. 31,003, *supra* note 194.

³²¹ *Id.* 1992 SEC LEXIS 1831, at *20-28.

mate concern of the NASD, however, was that, without a rule, it would lose listings to the exchanges.³²²

B. Legal Intervention

The inability of private ordering to prevent manipulation does not dictate that the law should intervene. Perhaps markets work best without government intervention. However, even Fischel and Ross, who express as much confidence in the power of markets as anyone, do not make the simple argument that a rule against manipulation is bad because markets should not have rules. Instead, they argue that the social costs of such a rule outweigh any benefits that it might yield.³²³

This conclusion is difficult to evaluate. Fischel and Ross justify it in terms of relative costs and benefits, but the costs of manipulation and the existing legal regime are not clear. We do not know how often prices are manipulated, how much harm manipulation does or how existing manipulation rules influence behavior. Given the available evidence, it is hard to justify either the status quo or radical change. In the face of this uncertainty, perhaps regulators should study the markets and the way that their rules work, reforming the law as evidence becomes available. Fischel and Ross, on the other hand, argue that the evidence already available demonstrates such a clear imbalance between costs and benefits that the law should be changed now.³²⁴ They may, however, exaggerate the cost of legal rules.

1. *Objective Rules*

According to Fischel and Ross, the legal prohibition of manipulation creates extraordinary—and unacceptable—costs because “manipulation depends entirely on the state of mind of the trader.”³²⁵ The costs of enforcing a prohibition of intentional manipulation are particularly high because observable acts do not reliably signal manipulative intent. Moreover, they argue, because intent is hard to discern, any legal regime prohibiting intentional manipulation will be under-inclusive or over-inclusive, or both. Fischel and Ross’ biggest problem seems to be that a rule against manipulative trading casts a broad shadow on innocent and useful trading: “Because the sanctions for

³²² *Id.* at *27 (“Finally, the NASD believes that adoption of the proposed rule will enhance the Nasdaq Stock Market’s ability to compete with exchange markets for listings. From a competitive standpoint, some exchanges regularly use the lack of a short sale rule as an argument to try to persuade companies to list.”). The proposal specifically noted that issuers were concerned that the lack of a short-sale rule would subject them to shorting into seasoned offerings. *Id.* at *25.

³²³ Fischel & Ross, *supra* note 8, at 522-23.

³²⁴ *See, id.*, at 535-36.

³²⁵ *Id.* at 522.

engaging in manipulation are severe and include criminal penalties as well as the possibility of a lifetime ban from the securities industry, traders, particularly high profile traders such as takeover arbitrageurs, will avoid conduct that might be characterized as manipulative.³²⁶

The overdeterrence that so worries Fischel and Ross can be ameliorated if severe sanctions are applied only to ill-motivated acts.³²⁷ Failing (or supplementing) this, overinclusiveness can be avoided if clear rules can be tailored to prevent objectionable practices without discouraging a great deal of appropriate conduct.³²⁸ Rules that clearly state what they require or forbid may have problems of their own, but they need not cause the sort of investor paralysis that Fischel and Ross think results from a blunt prohibition of trading with manipulative intent.

If the law prohibits trading for a particular purpose, then enforcing the law entails troublesome inquiries into what traders are thinking.³²⁹ These inquiries can be avoided with rules that proscribe trading practices that are often used for the purpose of influencing prices, without regard to the reason the trades are effected in a particular case. Rules that do not turn on a trader's intentions obviate most of Fischel and Ross' criticism. Objective rules can interdict undesirable trades without a costly and perhaps hopeless inquiry into the trader's motives. If they are carefully targeted and clearly state what they require or forbid, such rules can also reduce the risk of overdeterrence.³³⁰ If the regulated conduct is easily detected, such rules can be enforced with relative ease.³³¹

Rules that do not turn on intent have the additional advantage of controlling entirely innocent trading that temporarily disrupts re-

³²⁶ *Id.* at 523.

³²⁷ *See infra* part III.B.2.

³²⁸ *See generally* Colin S. Diver, *The Optimal Precision of Administrative Rules*, 93 *YALE L.J.* 65 (1983) (exploring general assumptions concerning administrative policy); Isaac Ehrlich & Richard A. Posner, *An Economic Analysis of Legal Rulemaking*, 3 *J. LEGAL STUD.* 257 (1974) (discussing efficiency of the legal process as a function of specificity); James A. Henderson, Jr., *Process Constraints in Tort*, 67 *CORNELL L. REV.* 901 (1982) (explaining the effect of efficiency considerations on substantive tort law); Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 *DUKE L.J.* 557 (1992) (comparing the relative costliness of promulgating rules and standards).

³²⁹ Fischel & Ross, *supra* note 8, at 507, 512.

³³⁰ *Cf.* Wolfson, *supra* note 271, at 810 (The stabilization rules represent "an effort to get away from the vagueness of [statutory prescriptions] and to provide government regulators and the regulated with a clear and precise description of specific, prohibited behavior.").

³³¹ The SEC's regulation of short sales is a good example of a rule that clearly states what it requires and is easily enforced. 17 *C.F.R.* § 240.10a-1 (1992). *Cf.* Kaplow, *supra* note 328, at 563, 581-84 (explaining that the benefit of avoiding future costs may outweigh the enforcement cost).

ported prices.³³² Recall that the temporary price changes associated with the trading of Milken and Mulheren had important consequences that the parties to the Wickes and Gulf & Western contracts probably would have wanted to avoid, and that the trading had those consequences regardless of whatever motivated the traders. Similarly, even if Jefferies bought Union Carbide only because it thought the stock was a good investment, the price spikes caused by the purchases may have misled other investors.³³³ Legal rules that reduce the incidence of trades that produce temporary price anomalies may be beneficial regardless of the reason that those trades are effected.

This is not to say that rules that precisely specify what traders can and cannot do are worth the price. Even economists who believe that manipulation is possible warn that "the welfare effects of banning manipulation are ambiguous."³³⁴ So long as the mechanisms by which trades affect price are in dispute, any set of manipulation rules will rest on controversial premises, and if those premises are wrong the rules may well have grossly inappropriate consequences.³³⁵ These problems aside, even very clear rules directed at particular trading practices may deter some socially desirable trading, and rules sufficiently narrow to avoid overdeterrence may not deter anything.³³⁶ For example, the harsh criticism sometimes directed at the SEC's stabilization rules suggests that it is not always possible to draft rules that clearly state what is required of the regulated.³³⁷ On the other hand, the SEC's very clear and easily enforced rules on short selling may deter desirable conduct.³³⁸ Nevertheless, rules can be fine tuned to increase their benefits and reduce their costs. If precise rules are inadequate, it is not because high-profile traders faced with Draconian sanctions will abstain from trading because they cannot determine what is prohibited.

One attempt to discourage manipulation while limiting the burden on socially desirable trading is the SEC's rule on short selling

³³² See Myerson, *supra* note 67, at D1 (restrictions on computerized trading, publication of securities with order imbalances, morning expirations and developments in trading strategies have reduced volatility when options and futures expire).

³³³ Cf. *Gilbert v. Bagley*, 492 F. Supp. 714 (M.D.N.C. 1980) (alleging that plaintiffs were induced to buy stock when defendants bid up price to discourage shareholders from tendering shares to issuer).

³³⁴ *Allen & Gale*, *supra* note 19, at 507; see also *id.* at 521; *Gerard & Nanda*, *supra* note 19, at 231-32, 234-35; *BAGNOLI & LIPMAN*, *supra* note 19, at 17-20; cf. *Allen & Gorton*, *supra* note 19, at 626-28 (restrictions on short sales create opportunities for manipulation).

³³⁵ The perhaps irresolvable dilemma that discordant economic theories pose for those responsible for making corporate and securities law has attracted attention recently. See *Booth*, *supra* note 20, at 1114-16; *Kraakman*, *supra* note 32, at 938-41; *Langevoort*, *supra* note 119, at 872-73, 886-89, 912-13, 919-20.

³³⁶ *Fischel & Ross*, *supra* note 8, at 522-23.

³³⁷ See, e.g., *COX ET AL.*, *supra* note 232, at 314-15; *Wolfson*, *supra* note 271.

³³⁸ See *Macey et al.*, *supra* note 31.

prior to secondary offerings. As discussed above, when an issuer announces that it will sell securities into the market, a manipulator may sell the stock short in order to depress the market price, thereby lowering the price at which the issuer will sell. The manipulator may plan to cover the short-sales in the public offering, thus earning a profit at very little risk, or he may simply hope to buy stock in the public offering for less than what he believes the stock is worth.

SEC rule 10b-21(T) regulates short-selling in connection with secondary offerings into the market.³³⁹ The rule provides that a person who sells an equity security short after a registration statement for securities of the same class is filed may not cover those sales in the public offering. This rule makes it unlawful to earn a quick profit by depressing price with short sales and then covering those sales in the offering. The rule does not provide complete protection, however, because a manipulator may still sell stock he already holds and then buy more at a bargain price in the offering, or sell short and cover in the market at a bargain price after the secondary distribution takes place. Whatever good the rule does, it does it at relatively low cost. The rule does not prohibit short selling,³⁴⁰ and thus should have minimal impact on the non-manipulative and perhaps beneficial short sales of traders who simply believe the stock is overpriced.³⁴¹

Rule 10b-21(T) may still be a bad rule, of course. It makes short-sales of bona fide investors more expensive than they would otherwise be because without the rule such sellers might be able to cover their short positions more cheaply in the public offering. Furthermore, it is possible that by discouraging some manipulators, the rule may actually hurt issuers and other market participants.³⁴² Perhaps in recognition of this uncertainty, the Commission adopted rule 10b-21(T) on a temporary basis, suggesting that it might revisit the issue after the rule has been in place for some time.³⁴³

Fischel and Ross themselves seem to recognize the value of prophylactic rules against certain trading practices that are convention-

³³⁹ 17 C.F.R. § 240.10b-21(T) (1992).

³⁴⁰ Fischel and Ross describe rule 10b-21(T) accurately in a footnote, *see* Fischel & Ross, *supra* note 8, at 522 n.81, but in the text they incorrectly state that it prohibits short sales in advance of public offerings. *Id.* at 522. On that premise they argue that the rule "imposes costs because it prevents those with negative beliefs . . . from acting on them by trading." *Id.*

³⁴¹ A rule prohibiting all short sales before a public offering might discourage people who believe that a security is overpriced from selling short, and thus would undermine the informational content of reported prices. *See* Gerard & Nanda, *supra* note 19, at 234-35; Macey et al., *supra* note 31, at 800, 813-14. In adopting rule 10b-21(T), the SEC emphasized that it would not interfere with non-manipulative short sales. *See* Exchange Act Release No. 26,028, *supra* note 194, at 89,387-88, 89,390-91.

³⁴² *See* Gerard & Nanda, *supra* note 19, at 226-29, 234-35.

³⁴³ *See* Exchange Act Release No. 26,028, *supra* note 194, at 89,387 n.16. The SEC may also grant exemptions from rule 10b-21(T). 17 C.F.R. § 240.10b-21(T)(c) (1992).

ally called manipulative—wash sales and matched orders. As noted above, manipulators sometimes move price and stimulate trading interest with wash sales, in which the same party is both buyer and seller, and matched orders, in which confederates simultaneously enter offsetting purchase and sale orders.³⁴⁴ Fischel and Ross call wash sales and matched orders “a form of fraud by conduct,” and would apparently forbid them absolutely, going substantially further than current law, which forbids them only when employed for certain purposes.³⁴⁵

2. *Intentional Manipulation*

Fischel and Ross' thesis is that the law should not prohibit actual trades as manipulative regardless of the trader's intent.³⁴⁶ The core of their argument is that if severe sanctions turn solely on a trader's state of mind, fear of prosecution will deter socially desirable trading.³⁴⁷ Although this argument has at least two targets, heavy sanctions and

³⁴⁴ See *supra* text accompanying notes 130-36.

³⁴⁵ See Fischel & Ross, *supra* note 8, at 510-11; see also 15 U.S.C. § 78i(a)(1) (1988) (wash sales and matched orders are unlawful when used “[f]or the purpose of creating a false or misleading appearance of active trading . . . or a false or misleading appearance with respect to the market.”).

Although Fischel and Ross seem to find wash sales and matched orders objectionable, they insist on characterizing them as a species of fraud, “designed to mislead market participants into believing that buyers and sellers are trading in a security when in fact no transactions are taking place.” Fischel & Ross, *supra* note 8, at 510.

As a technical matter, those initiating wash sales or entering matched orders do not act fraudulently—they neither make false statements nor cause others to do so. They deliver and pay for the securities that they trade, and they do not report transactions that never occur. See RESTATEMENT (SECOND) OF TORTS § 525 (1976) (misrepresentation is an element of fraud). To be sure, they do not expect their transactions to result in a change in beneficial ownership, but they never maintain otherwise. At most, they play on the market's understanding that reported trades represent transactions between traders dealing at arms' length. Nevertheless, these traders do not affirmatively misrepresent their opinions, intentions or any other fact; moreover, there is no reason that the market's interpretation of the act of entering an order is binding on traders so as to make matched orders and wash sales “false.” If the market's understanding is enough to make matched orders “false,” then it would seem that a purchase designed to increase price is just as “false,” given the market's understanding that buyers try to get the lowest price possible. In fact, the common law had trouble dealing with fictitious transactions, and the language of the opinions finding such transactions objectionable would often apply equally to trades designed to move price. See 8 LOSS & SELIGMAN, *supra* note 39, at 3946-53.

Fischel and Ross insist that the concept of fraud cannot be used to forbid actual trades. They argue that the concept of fraud works for wash sales and matched orders because those “fictitious” trades are “bad acts,” so that the law can identify objectionable conduct by applying objective criteria. Actual trades, on the other hand, are objectionable, as Fischel and Ross see it, only if made with bad intent; thus, the law cannot be made to turn on objective evidence. Fischel & Ross, *supra* note 8, at 511. However, laws against actual trades can turn on objective evidence if the law simply makes it unlawful to effect actual trades in certain situations. See, e.g., 17 C.F.R. §§ 240.10a-1 (short sales), 240.10b-21(T) (shorting into seasoned offering) (1992).

³⁴⁶ See Fischel & Ross, *supra* note 8, at 507, 553.

³⁴⁷ See *id.* at 522.

open-ended, intent-based rules, Fischel and Ross focus on the latter.³⁴⁸ To put the argument in perspective, however, it is important to bear in mind that the government brings relatively few securities manipulation cases, let alone criminal cases.³⁴⁹ Moreover, the setbacks in *United States v. GAF Corp.* and *United States v. Mulheren* will likely cause the United States Attorney for the Southern District of New York to pause before initiating new criminal cases. The likelihood of future prosecutions was further reduced when the criminal sentences for manipulation in the Princeton/Newport case were vacated. In that case the trial judge concluded that the defendants "made a persuasive argument that the government would not have proceeded criminally against these defendants solely on the" manipulation charges.³⁵⁰

Even if few cases are brought, there remains the question of whether the law should inquire into the motives of securities traders. It may be impossible to prevent manipulation without resorting to a residual rule against willful manipulation.³⁵¹ Because market and contracting practices are diverse and constantly changing, neither private parties nor regulators (whether self-regulatory or government agencies) are likely to foresee all possible manipulative devices or to be able to describe those devices in precise rules.³⁵² Moreover, any set of objective rules sufficient to catch all or even most intentional manipulative trades would almost surely cover a substantial amount of

³⁴⁸ For a discussion of the use of criminal sanctions in securities cases, see John C. Coffee, Jr., *Hush!: The Criminal Status of Confidential Information After McNally and Carpenter and the Enduring Problem of Overcriminalization*, 26 AM. CRIM. L. REV. 121 (1988). As Coffee notes, "[f]air notice alone does not minimize [the cost of complying with the law]; only restricting the scope of the criminal law can do that." *Id.* at 151.

³⁴⁹ See McLucas & Angotti, *supra* note 55, at 633 n.1. The SEC aggressively pursues penny-stock schemes, but these typically involve fraud and breach of fiduciary duty as well as manipulative trading. *Id.*

³⁵⁰ *United States v. Zarzecki*, 24 Sec. Reg. & L. Rep. 1482 (S.D.N.Y. Sept. 4, 1992); see also Christi Harlan, *Law Firm is Barred from Taking Case Against Former Client AMR*, WALL ST. J., Sept. 9, 1992, at B8 ("Calling the alleged manipulation of [C.O.M.B.] securities 'supposedly criminal,' Judge Carter said that an administrative disciplinary action was a more appropriate response than a criminal prosecution.")

³⁵¹ Edmund Kitch has criticized rule 10b-5 on the ground that Congress would have enacted a generalized prohibition itself if it wanted one. Edmund W. Kitch, *A Federal Vision of the Securities Laws*, 70 VA. L. REV. 857, 861 (1984). I have previously indicated sympathy with Kitch's position. See Thel, *supra* note 7, at 463. However, section 10(b) may be interpreted to allow the SEC to decide whether to address manipulation with a generalized prohibition, and the SEC's decision to adopt rule 10b-5 reflected the decision that a generalized approach was appropriate. See American Bar Association, *Conference on Codification of the Federal Securities Laws*, 22 BUS. LAW. 793, 922 (1967) (Milton Freeman describing adoption of rule 10b-5); Milton V. Freeman, *Foreword: Happy Birthday 10b-5: 50 Years of Antifraud Regulation*, 61 FORDHAM L. REV. 51 (1993); see also Donald C. Langevoort, *Rule 10b-5 as an Adaptive Organism*, 61 FORDHAM L. REV. 57 (1993) (arguing that the ambiguity of Rule 10b-5 has contributed to its survival).

³⁵² See Ehrlich & Posner, *supra* note 328, at 268.

innocent and valuable trading. Accordingly, an effective legal regime may have to supplement precise rules with broad standards.³⁵³

Fischel and Ross argue that the law cannot identify traders who trade for the purpose of moving price. They argue that a person who trades for the purpose of moving price does not engage "in any conduct that can be objectively determined to be socially undesirable. The only act is trading, trading that cannot be distinguished from other trading using objective measures."³⁵⁴ However, a plaintiff cannot prevail in a manipulation case simply by proving that the defendant's trades moved price, or even that those trades moved price and induced others to trade.³⁵⁵ Indeed, the securities laws do not make it unlawful to trade for the purpose of moving price. The closest they come is section 9(a)(2) of the Exchange Act, which makes it unlawful to change price for the purpose of inducing others to trade.³⁵⁶ Rule 10b-5, which does not even use the word manipulate, is violated only when a defendant acts with the intent to deceive.³⁵⁷

Objective evidence may demonstrate that a defendant acted with an intent to induce others to trade or to mislead traders who believe that reported prices reflect trades between market participants who are trying to buy and sell at the best price possible. Consider once again the *Milken*, *Mulheren*, *GAF* and Princeton/Newport cases. This article discusses these cases only as situations in which manipulation may be possible, and I express no opinion on what the defendants were trying to accomplish or on whether what they did was unlawful. Nonetheless, these were important cases, and the record should be clear.

Fischel and Ross suggest that it is unlikely that the first three of these cases involved manipulative schemes. They also suggest that the objective evidence of manipulative intent was too ambiguous to allow for a determination of manipulative intent. However, the government did not rest on ambiguous evidence of trading patterns in any of the

³⁵³ For an argument that the intent-based rules against commodities manipulation has been successful despite some lapses, see 3 PHILIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, *COMMODITIES REGULATION* ch. 5 (1989). Other commentators reject this conclusion, however. See Friedman, *supra* note 17, 35-37; Jerry Markham, *Manipulation of Commodity Futures Prices—The Unprosecutable Crime*, 8 YALE J. ON REG. 281 (1991); Wendy Collins Perdue, *Manipulation of Futures Markets: Redefining the Offense*, 56 FORDHAM L. REV. 345 (1987).

³⁵⁴ Fischel & Ross, *supra* note 8, at 511.

³⁵⁵ See *Chris-Craft Industries, Inc. v. Piper Aircraft Corp.*, 480 F.2d 341 (2d Cir.), *cert. denied*, 414 U.S. 910 (1973); *Trane Co. v. O'Connor Securities*, 561 F. Supp. 301 (S.D.N.Y.), *appeal dismissed*, 718 F.2d 26 (2d Cir. 1983).

³⁵⁶ 15 U.S.C. § 78i(a)(2) (1988).

³⁵⁷ See *Aaron v. SEC*, 446 U.S. 680 (1980); *Ernst & Ernst v. Hochfelder*, 425 U.S. 185 (1976); see also *Schreiber v. Burlington Northern, Inc.*, 472 U.S. 1 (1985); *Santa Fe Industries v. Green*, 430 U.S. 462 (1977); cf. *United States v. Chestman*, 947 F.2d 551 (2d Cir. 1991), *cert. denied*, 112 S. Ct. 1759 (1992) (SEC rulemaking power under 15 U.S.C. § 78n(e)(2) extends to nondeceptive conduct).

four cases. In each, the government offered objective evidence of manipulative intent that was not equally consistent with innocent trading. In *Milken*, the government had a witness prepared to testify that he understood Milken to order him to manipulate the price of Wickes common stock. In *Mulheren*, Boesky testified about his conversation with Mulheren. In *GAF*, Jefferies' principal testified that the defendants asked him to manipulate Union Carbide stock. In Princeton/Newport the request that initiated the manipulation was captured on tape. Perhaps these witnesses lacked credibility, or perhaps the conversations were innocent; regardless, it is clear that probative, objective evidence of state of mind may be available in manipulation cases.

Of course, innocent traders should not have to bear the burden of criminal prosecution or the risk of wrongly being found to have acted with forbidden intent. However the government does not seem to have been pursuing frivolous cases, and liability in private civil actions rests on proof of intent. Often the defendant will have realized some benefit from a price change that will itself serve as objective evidence that the defendant had a purpose in moving price. In any case, accused manipulators enjoy the same procedural protections as other defendants, and they are more likely to have the resources necessary to mount a vigorous defense.

Perhaps juries are apt to be too quick to believe the worst of defendants in manipulation cases. Judicial review is still available, however, and Fischel and Ross' three high-profile cases show that judges are sensitive to the plight of those accused of manipulation. The convictions in *GAF* and *Mulheren* were reversed on appeal, and the trial judge ignored the Wickes transaction when she sentenced Milken. Moreover, the Second Circuit, when it reversed Mulheren's conviction, displayed its uneasiness with the concept of a crime that supposedly exists entirely inside the defendant's head. Indeed, the judge who vacated the Princeton/Newport sentences expressed doubts about whether manipulation is even a crime.

A prohibition of purposeful manipulation might chill socially desirable trading, but that chill can be ameliorated. Some prominent commentators who oppose extensive government intervention in the securities markets have expressed support for broad rules against willful misconduct.³⁵⁸ Consider, for example, Judge Winter's dissenting opinion in *United States v. Chestman*.³⁵⁹ Judge Winter, whose dissent is probably the best judicial description of the quagmire of insider trad-

³⁵⁸ See Coffee, *supra* note 348, at 152 (Concluding that the proper approach is to restrict criminal prosecutions to "narrow, context-specific statutes (such as Rule 10b-5) as opposed to broader, sprawling rules borrowed from the common law.").

³⁵⁹ 947 F.2d 551, 571 (2d Cir. 1991) (dissenting in part), *cert. denied*, 112 S. Ct. 1759 (1992).

ing law, recognized "that regulation of insider trading without legislative or regulatory guidelines would involve a mare's nest of analytic and definitional problems."³⁶⁰ Nonetheless, he argued that it is a crime to trade on misappropriated information, even though there is no obvious relationship between such a proscription and the language of section 10(b) of the Exchange Act.³⁶¹ Although he sympathized with the majority's concern over the difficulty of drawing lines, he had "little difficulty"³⁶² in concluding that a criminal conviction could be affirmed where the defendant's conduct indicated knowledge that his actions were improper.³⁶³

Consider also the position of former SEC Commissioner Edward Fleischman. Near the end of his term, Commissioner Fleischman published a letter to President Bush in which he vigorously criticized the Commission's regulatory program.³⁶⁴ Commissioner Fleischman argued that the SEC should replace or supplement the command-and-control rules that it regularly imposes with broadly stated performance standards. Taking the same tack as Fischel and Ross, Commissioner Fleischman argued that the problem with the existing regime is that the benefits of regulation have been exaggerated and the costs have been minimized.³⁶⁵ He did not conclude, however, that the government should abandon market regulation. Instead, he argued that broad standards protect the public and promote liquidity better than detailed rules do. He insisted that performance standards and general rules afford a safeguard against both harmful practices and intrusive regulation, suggesting that they should be used in place of—or as alternatives to—detailed rules.³⁶⁶

Commissioner Fleischman specifically advocated the use of broad rules to regulate manipulation. Thus, he proposed that rule 10b-6, which regulates trading by persons interested in the distribution of a security, be changed to exempt transactions not engaged in for the purpose of raising the price of the distributed security.³⁶⁷ He suggested the same approach for the rules governing issuer repurchases.³⁶⁸ Commissioner Fleischman did not suggest that broad

³⁶⁰ *Id.* at 573.

³⁶¹ *Id.* at 578.

³⁶² *Id.* at 579.

³⁶³ *Id.* at 580-81.

³⁶⁴ Letter from Commissioner Edward H. Fleischman to President George H.W. Bush (March 25, 1992) (on file with the Cornell Law Review).

³⁶⁵ *Id.* at 8-9.

³⁶⁶ *Id.* at 10.

³⁶⁷ *Id.* at 7.

³⁶⁸ *Id.* at 7; *cf. id.* at 21 (suggesting performance standard should be incorporated in rule 10b-17).

language should be limited to safe harbors, either.³⁶⁹ He praised the use of "general anti-manipulative" rules to prevent recurrence of "[t]he 'bear raids' of the 1920s [which] were manipulative at their core,"³⁷⁰ and urged revision of the rules regulating short sales in a similar manner.³⁷¹

Commissioner Fleischman took leave of the conventional criticism of the SEC's regulatory program when he took as his model rule 10b-5, the Commission's "single most renowned rule."³⁷² While he recognized that broad rules may be harder to enforce, he considered the cost worthwhile:

[R]eform of this Agency's regulatory program has the inevitable concomitant of expansion of the Agency's policing and prosecuting program. . . . [This] leads me to the ultimate conclusion that this Commission's enforcement program *can* fulfill the resulting additional responsibility and can fulfill it well—at a far lesser systemic cost than prevails under the Commission's regulatory approach. . . . [T]his Commission could and should be willing to rely more heavily on a well-directed policing and prosecuting program to remove a real amount of systemic cost without removing *anywhere near* an equal extent of direct and indirect benefits to investors.

Performance standards, market mechanisms, and clarity in rulemaking all contribute to removal of systemic costs. To the extent that in the securities markets those regulatory methods rely on enforcement by market forces, by self-regulatory organizations and by this Agency, that reliance is both well-founded and well-directed to the maintenance of the fundamental investor protections that have made and have kept the primary and secondary securities markets in the United States . . . "the deepest, the most liquid and the fairest securities markets anywhere in the world."³⁷³

CONCLUSION

As Fischel and Ross emphasize, "[m]uch of the regulation of financial markets seeks to prevent manipulation." The law should not lightly abandon this quest, Fischel and Ross' arguments notwithstanding. Manipulators can sometimes control prices with trades, and by

³⁶⁹ For example, he may have meant to suggest that illicit purpose should be a threshold element of rule 10b-6.

In fact, the underlying objective of the rule, which is to allow the free forces of supply and demand to fix the trading price for securities in distribution, would be achieved so long as persons interested in the distribution did not engage in transactions *for the purpose* . . . of creating actual or apparent active trading or of raising the price of the distributed security.

Id. at 7.

³⁷⁰ *Id.* at 11.

³⁷¹ *Id.* at 11-12.

³⁷² *Id.* at 10.

³⁷³ *Id.* at 23-24.

doing so they can reap profits, whether by taking advantage of preexisting contracts or by inducing other market participants to trade at manipulated prices.

Private actors and institutions can do much to discourage manipulation, and when the problem appears acute, private agents do respond. However, it is unlikely that manipulation can be completely deterred without legal intervention, and deterring manipulation has been a central goal of the federal securities laws. Nonetheless, the law's primary method of dealing with manipulation has not been to make it unlawful to trade for the purpose of changing price, notwithstanding Fischel and Ross' heated argument that the law should not prohibit actual trades on the basis of a trader's intentions.

The securities statutes do not forbid people to trade for the purpose of influencing price,³⁷⁴ and they do not forbid the employment of "manipulative devices" except in certain exceptional circumstances.³⁷⁵ Instead, the Exchange Act makes it illegal to engage in a few clearly defined practices for specific purposes.³⁷⁶ Otherwise, it simply allows the SEC to regulate manipulative devices and contrivances. In turn, the Commission has promulgated a series of rules against particular trading practices, most of which do not turn on a trader's motives. These rules are supplemented by rule 10b-5 when manipulators use novel or particularly outrageous practices.

For the most part, this response is what Fischel and Ross have shown is necessary. It is often hard to tell what motivates a particular trade, so rules that turn on intentions would be unlikely to prevent intentional manipulation. Objective rules may more accurately identify and prevent manipulative trading, but they have their own problems. The contours of manipulation are difficult to discover, and it is unlikely that any set of rules could discourage all inappropriate trades, and only inappropriate trades. Moreover, practices in financial markets change quickly, so that even if a perfect set of rules could be drafted, they might soon become obsolete. Accordingly, the SEC and markets themselves are likely to do better a job of regulation than Congress, because administrative rules can be modified as their consequences become clear or practices change. Finally, precise rules will leave loopholes, especially if practices evolve more quickly than rules. Judicious use of rule 10b-5 for novel or outrageous conduct can provide a useful backup to the regulatory scheme.

³⁷⁴ The closest that the Exchange Act comes is to prohibit effecting trades in an exchange-registered security changing the price of such security, "for the purpose of inducing the purchase or sale of such security by others." 15 U.S.C. § 78i(a)(2) (1988).

³⁷⁵ The Exchange Act forbids brokers and dealers and those involved in tender offers to employ manipulative devices. 15 U.S.C. §§ 78n(e), 78o(c) (1988).

³⁷⁶ See 15 U.S.C. § 78i(a) (1988).

Remarkably, the Exchange Act established this regulatory scheme almost sixty years ago in response to many of the same arguments that Fischel and Ross have just made.³⁷⁷ After the stock market collapsed in 1929, numerous proposals were made to prohibit manipulative trading.³⁷⁸ However, both thoughtful reformers and those to be reformed objected on the grounds that trading practices were too complicated and dynamic to be governed by blunt rules.³⁷⁹ Members of Congress also heard about how difficult it would be to determine the intentions of market participants.³⁸⁰ The argument that carried the day in 1934 was that trading should be regulated gingerly, if at all, and that any regulations should be constantly reexamined and refined. Instead of simply making it unlawful to trade for the purpose of changing price, the law charges administrators with studying and carefully regulating manipulation. The law recognizes manipulation for the complicated problem that it is.

³⁷⁷ The history of the law governing securities manipulation is also remarkably consistent with the predictions of Isaac Ehrlich and Richard Posner's dynamic model of the process by which legal actors determine the degree of specificity with which legal commands are expressed. See Ehrlich & Posner, *supra* note 328, at 272-75.

³⁷⁸ See Thel, *supra* note 7, at 411-17 (discussing legislative proposals); see also *id.* at 451, 459 n.343 (noting that early House and Senate versions of the Exchange Act would have prohibited trading for the purpose of changing price); *id.* at 451 n.306 (discussing rejected amendment that would have prohibited stabilization).

³⁷⁹ For example, a prominent committee studying reform, organized by the Roosevelt Administration, argued that

Stock exchanges raise essentially new problems in Federal regulation. They do not present a static situation susceptible to fixed standards. On the contrary, it is a highly dynamic, ever-changing picture, subject to untold and unknown possibilities and combinations that are today unpredictable. The thing to be avoided is the placing of this complex and important mechanism in a strait jacket.

Report to Secretary of Commerce of Committee on Stock Exchange Regulation 6, in Letter from the President of the United States to the Chairman of the Committee on Banking and Currency with an Accompanying Report Relative to Stock Exchange Regulation (S. Comm. Print 1934), reprinted in 5 LEGISLATIVE HISTORY, *supra* note 212, at Item 16; see also David S. Ruder, *Civil Liability Under Rule 10b-5: Judicial Revision of Legislative Intent?*, 57 Nw. U.L. REV. 627, 658 (1963) (section 10(b) was designed to allow regulation of new manipulative devices); Thel, *supra* note 7, at 419-24 (consensus for administrative regulation); *id.* at 434-36, 439, 441, 447-78 (citing stock exchange support for administrative regulation); *id.* at 438 n.233 (noting argument that heavy sanctions for violations of open-ended rules would keep responsible people from participating in the market); cf. *id.* at 437-38 (citing criticism of unclear provisions and heavy sanctions).

³⁸⁰ See *Stock Exchange Practices: Hearings Before the Comm. on Banking and Currency on S. Res. 84 (72d Cong.) and S. Res. 56 & S. Res. 57 (73d Cong.)*, 73d Cong., 1st Sess. 6508-11, in 6 LEGISLATIVE HISTORY, *supra* note 212, at item 22; *Stock Exchange Regulation: Hearings Before the House Interstate and Foreign Commerce Committee on H.R. 7852 and H.R. 8720*, 73d Cong., 2d Sess. 112-13, reprinted in 8 LEGISLATIVE HISTORY, *supra* note 212, at item 23.