
ARTICLE

INSIDER TRADING VIA THE CORPORATION

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A U.S. firm buying and selling its own shares in the open market can trade on inside information more easily than its own insiders because it is subject to less stringent trade-disclosure rules. Not surprisingly, insiders exploit these relatively lax rules to engage in indirect insider trading: they have the firm buy and sell shares at favorable prices to boost the value of their own equity. Such indirect insider trading imposes substantial costs on public investors in two ways: by systematically diverting value to insiders and by inducing insiders to take steps that destroy economic value. To reduce these costs, I put forward a simple proposal: subject firms to the same trade-disclosure rules that are imposed on their insiders.

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INTRODUCTION

Publicly traded U.S. firms buy and sell a staggering amount of their own shares in the open market each year. Open-market repurchases (OMRs) alone total hundreds of billions of dollars per year; in 2007, they reached \$1 trillion.¹ Firms are also increasingly selling shares in the open market through so-called “at-the-market” issuances (ATMs).²

For a U.S. firm trading in its own shares, trade-disclosure requirements are minimal. The firm needs to report, at most, aggregate monthly trading activity, and may wait until well into the next quarter before doing so.³ Thus, the firm is permitted to buy and sell its own shares secretly in the open market for months and withhold the exact details of its trades from shareholders and regulators.

The trade-disclosure requirements imposed on U.S. firms are quite lax relative to those imposed on firms listed on some of the largest overseas stock markets. For example, the United Kingdom and Hong Kong require firms trading in their own shares to disclose the details of their trades by the morning of the next business day, while Japan requires same-day disclosure.⁴ In Switzerland, firms commonly repurchase shares through a second, dedicated trading line, thereby making trade disclosure instantaneous.⁵

More important, the trade-disclosure requirements imposed on U.S. firms are substantially less stringent than those imposed on *insiders* of those firms. Since the 1930s, insiders of a U.S. firm have been required to report the specific details of each trade in the firm’s shares.⁶ Before the Sarbanes–Oxley Act of 2002,⁷ insiders typically had until the tenth day of the following month to disclose such trades.⁸ Today, an insider’s trades in firm shares must be reported within two business days.⁹

The strict trade-disclosure rules for insiders reflect a strong, longstanding consensus in the United States that a corporation’s insiders—its officers, directors, and controlling shareholder (if any)—should not be permitted to profit freely from their access to inside information about the firm. These rules are part of an elaborate set of regulations designed to reduce insiders’

¹ See *infra* Section II.A.

² See *infra* Section III.A.

³ See *infra* subsection II.B.3.

⁴ See *infra* Section V.A.

⁵ *Id.*

⁶ See *infra* subsection I.B.2.

⁷ 15 U.S.C. § 7201 *et seq.* (2012).

⁸ See *infra* subsection I.B.2.

⁹ *Id.*

ability to engage in insider trading: buying and selling a firm's shares on inside information.¹⁰

Unfortunately, U.S. policymakers have failed to grasp that when insiders are subject to strict trade-disclosure requirements and firms are not, insiders have a strong incentive to exploit the relatively lax trade-disclosure rules that apply to firms in order to engage in *indirect* insider trading: having the firm buy and sell its own shares at favorable prices to increase the value of the insiders' equity. Such indirect insider trading—made possible by insiders' control over the firm's assets—can generate substantial profits for insiders. If, for example, insiders own 10% of a firm's equity, they will capture approximately \$1 out of every \$10 in insider-trading profits generated by the firm when it buys and sells its own shares on inside information.

Although U.S. firms are commonly thought to have relatively diffuse ownership, average insider ownership in publicly-traded firms is, in fact, surprisingly high. For example, one study of 375 randomly selected publicly traded firms found that directors and officers own an average of 24%-32% of a firm's equity (depending on the measurement methodology).¹¹

To be sure, larger firms tend to have a lower percentage of insider ownership.¹² Thus, average insider ownership on a value-weighted basis may be less than 25%. Nevertheless, insiders' percentage ownership is likely to be substantial in many cases.

Not surprisingly, insiders use their control of the firm to engage in indirect insider trading.¹³ Insiders acknowledge using repurchases to buy stock that they believe is underpriced and equity issuances to sell stock that they believe is overpriced.¹⁴ There is also a substantial body of empirical work in the finance literature documenting that repurchases and equity issuances are

¹⁰ See generally Jesse M. Fried, *Reducing the Profitability of Corporate Insider Trading Through Pretrading Disclosure*, 71 S. CAL. L. REV. 303, 329-48 (1998) [hereinafter Fried, *Reducing the Profitability*] (describing the regulations used to reduce corporate insider trading and the limitations of those regulations). I use the term "insider trading" to mean insiders buying or selling shares on inside information, whether that trading is legal or illegal.

¹¹ Clifford G. Holderness, *The Myth of Diffuse Ownership in the United States*, 22 REV. FIN. STUD. 1377, 1382-83 (2009). This figure does not include insiders' stock options, which would further increase their effective equity ownership. See also Ronald C. Anderson et al., *Founders, Heirs, and Corporate Opacity in the United States*, 92 J. FIN. ECON. 205, 207 (2009) (reporting that of the 2000 largest industrial U.S. firms, 22.3% are founder-controlled and 25.3% are heir-controlled firms, with average equity stakes of approximately 18% and 22% respectively); Yoser Gadhoun et al., *Who Controls US?*, 11 EUR. FIN. MGMT. 339, 344-52 (2005) (reporting that 59.74% of U.S. corporations have controlling shareholders who hold at least 10% of the voting shares).

¹² See Holderness, *supra* note 11, at 1378.

¹³ See *infra* Sections II.D & III.C.

¹⁴ *Id.*

frequently driven by insiders' desire to indirectly buy stock at a low price or sell stock at a high price.¹⁵

Such indirect insider trading likely imposes considerable costs on public investors in two ways. First, just like ordinary "direct" insider trading, indirect insider trading secretly redistributes value from public investors to insiders.¹⁶ To be sure, much of the indirect insider-trading profits generated by firms are shared with some public investors. But on average, public investors lose and insiders profit to the tune of several billion dollars per year.¹⁷

Second, the use of the corporation as a vehicle for insider trading can lead insiders to waste economic resources. For example, indirect insider trading can distort capital deployment decisions by reallocating capital between the shareholders and the firm in a way that destroys economic value.¹⁸ Thus, indirect insider trading can diminish the value flowing to investors over time by far more than the profits reaped by insiders.

The purpose of this Article is threefold: (1) to demonstrate that insiders have an incentive to (and do in fact) exploit the relatively lax trade-disclosure rules applicable to firms to enrich themselves via indirect insider trading; (2) to describe the costs of such indirect insider trading to public shareholders; and (3) to put forward a proposal that, I show, would substantially diminish insiders' ability to engage in indirect insider trading and reduce the resulting costs to public investors: subject firms to the same two-day disclosure rule applied to their insiders.

The remainder of the Article is structured as follows: Part I briefly describes the insider-trading regulations applicable to insiders, the means by which firms trade in their own shares on the open market, and the relatively lax insider-trading regulations imposed on these firms. Part II examines how insiders use share repurchases to engage in indirect insider trading; Part III explains how insiders use equity issuances to engage in indirect insider trading. Part IV identifies the cost to public investors of indirect insider trading. Finally, Part V describes my proposal that firms be subjected to the same trade-disclosure rules as insiders.

¹⁵ *Id.*

¹⁶ *See infra* subsection IV.A.1.

¹⁷ *Id.*

¹⁸ *See infra* Section IV.B.

I. DIRECT INSIDER TRADING AND ITS REGULATION

This Part briefly reviews the economics and regulation of direct insider trading by persons controlling a firm. Section A discusses the costs imposed by direct insider trading on public investors. Section B describes the main insider-trading regulations applicable to insiders trading personally in their firms' shares.

A. Costs of Direct Insider Trading

Direct insider trading by those individuals controlling the firm imposes costs on public investors by (1) systematically diverting value from public shareholders to insiders, and (2) undermining and distorting insiders' incentives to generate economic value, thereby reducing the size of the pie. As we will see in Part IV, these two types of costs also arise from *indirect* insider trading.

1. Diversion of Value

When insiders use private information to time their personal trades, they directly reduce public shareholders' returns. Each dollar reaped by insiders comes at public investors' expense.¹⁹ In an earlier article, I calculated that such trading puts at least several billions of dollars into the pockets of insiders each year.²⁰ This diversion of value reduces public investors' expected returns and increases firms' cost of capital.²¹

One might argue that insider-trading profits are just another form of compensation. In principle, for example, firms could reduce other components of executives' and directors' compensation arrangements to offset

¹⁹ See H. Nejat Seyhun, *Insiders' Profits, Costs of Trading, and Market Efficiency*, 16 J. FIN. ECON. 189, 190-91 (1986) (noting that insider-trading profits reduce public investors' profits directly to the extent that market-makers match investors' orders with those of insiders who trade on inside information, and indirectly to the extent that market-makers increase the bid-ask spread). For a recent review of the empirical literature, see Stanislav Dolgoplov, *Insider Trading, Informed Trading, and Market Making: Liquidity of Securities Markets in the Zero-Sum Game*, 3 WM. & MARY BUS. L. REV. 1 (2012).

²⁰ See Fried, *Reducing the Profitability*, *supra* note 10, at 323 (estimating that corporate insiders make almost \$5 billion each year in insider-trading profits).

²¹ See Lawrence M. Ausubel, *Insider Trading in a Rational Expectations Economy*, 80 AM. ECON. REV. 1022, 1036 (1990) (analyzing the effect of insider trading on the cost of capital). Not surprisingly, the enforcement of insider-trading laws tends to reduce firms' cost of capital. See generally Utpal Bhattacharya & Hazem Daouk, *The World Price of Insider Trading*, 57 J. FIN. 75, 90-104 (2002) (determining empirically that insider-trading enforcement is associated with a significant decrease in the cost of equity capital).

expected insider-trading profits.²² But insider-trading profits are a peculiar type of pay. They are tied to insiders' informational advantage and their ability to control the flow of information to the market, not to their contribution to economic-value creation by the firm. Permitting insiders to make such gains is an inefficient way to reward them for performance.²³ Indeed, as I explain in the following subsection, these profits provide insiders with incentives to take steps that may destroy economic value.²⁴

2. Weakening and Distortion of Incentives

In addition to diverting value directly from public investors to firm insiders, insider trading may reduce the total amount of value to be shared between public investors and insiders. First, it can decrease insiders' motivation to generate value with the firm's assets. For example, permitting insiders to sell before their firm discloses bad news reduces the financial payoff differential between good and poor performance, thereby undermining insiders' incentive to increase value.

Second, insider trading can create perverse incentives. For example, insiders who are free to sell large amounts of shares may seek to raise short-term stock prices by running the firm in a way that improves short-term results at the expense of long-term economic value.²⁵ Insiders may also have incentives to choose less transparent (and less valuable) projects because the lack of transparency enables insiders to profit more from insider trading.²⁶

²² See, e.g., Dennis W. Carlton & Daniel R. Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857, 881 n.80 (1983) (arguing that in a competitive labor market, the salary of a manager who cannot trade on inside information will be higher than that of a manager who can).

²³ See, e.g., Lucian Arye Bebchuk & Chaim Fershtman, *Insider Trading and the Managerial Choice Among Risky Projects*, 29 J. FIN. & QUANTITATIVE ANALYSIS 1, 12-13 (1994) (explaining that total compensation paid to insiders must be increased when insider trading is permitted); Frank H. Easterbrook, *Insider Trading, Secret Agents, Evidentiary Privileges, and the Production of Information*, 1981 SUP. CT. REV. 309, 332 (explaining why insider trading is an inefficient compensation scheme for corporate managers).

²⁴ See *infra* subsection I.A.2.

²⁵ See Fried, *Reducing the Profitability*, *supra* note 10, at 362 (explaining how executives' ability to profit from short-term stock-price fluctuations can reduce long-term value); see also Mark Bagnoli & Naveen Khanna, *Insider Trading in Financial Signaling Models*, 47 J. FIN. 1905, 1921-22 (1992) (explaining how managers may have an incentive to act inefficiently to make insider-trading profits).

²⁶ See Oren Bar-Gill & Lucian Arye Bebchuk, *The Costs of Permitting Managers to Sell Shares* 2, 18-20 (Oct. 2003) (unpublished manuscript), available at http://www.law.harvard.edu/programs/corp_gov/papers/03.Bar-Gill.Bebchuk.cost-permitting.pdf (presenting a formal model showing why managers who are free to unload their stock based on private information have an incentive to make such information unobservable to the market). For a contrary view that insider trading improves incentives, see Carlton & Fischel, *supra* note 22, at 866-72. For a critique of this contrary view, see Fried, *Reducing the Profitability*, *supra* note 10, at 314-15.

B. Regulation

The main regulations governing trading by insiders in their own firms' shares are Rule 10b-5,²⁷ which prohibits trading on certain kinds of information, and Section 16(a),²⁸ which requires insiders to disclose such trades.

1. Rule 10b-5 and its Limits

Rule 10b-5, promulgated by the Securities and Exchange Commission (SEC) under Section 10 of the Securities Exchange Act of 1934 (the 1934 Act), requires that certain persons possessing "material" nonpublic information disclose that information or abstain from trading.²⁹ Among the individuals subject to Rule 10b-5 are persons considered to owe a preexisting fiduciary duty to the counterparty of the (potential) trade. Because a firm's officers and directors are considered to owe a fiduciary duty to the firm's shareholders under corporate law, Rule 10b-5 applies to a firm's officers and directors when they trade in the firm's shares.³⁰ For similar reasons, Rule 10b-5 would also be expected to apply to a firm's controlling shareholder.³¹

While Rule 10b-5 substantially reduces the amount of direct insider trading, it cannot prevent insiders from trading on valuable inside information in many cases for two reasons. First, Rule 10b-5 applies only when insiders trade on information that is considered "material."³² "Material

Carlton and Fischel also claim that insider trading enables information to be transmitted to the market more quickly, thereby making stock prices more accurate, or "efficient." Carlton & Fischel, *supra* note 22, at 866-68. But the ability to engage in insider trading may cause insiders to withhold information from the market, making markets *less* efficient. *See, e.g.*, Easterbrook, *supra* note 23, at 333 (noting that the "prospect of insiders' gains may lead the firm to delay the release of information"); Michael J. Fishman & Kathleen M. Hagerty, *Insider Trading and the Efficiency of Stock Prices*, 23 RAND J. ECON. 106, 106-07 (1992) (using a formal model to explain how insider trading can decrease price efficiency); Naveen Khanna et al., *Insider Trading, Outside Search, and Resource Allocation: Why Firms and Society May Disagree on Insider Trading Restrictions*, 7 REV. FIN. STUD. 575, 576 (1994) (observing that insider trading may increase the cost to liquidity traders without generating more price efficiency because it reduces trading by informed outsiders). In this Article, I assume that insider trading—direct or indirect—has neither a net-negative nor a net-positive effect on price efficiency.

²⁷ 17 C.F.R. § 240.10b-5 (2013).

²⁸ Sarbanes-Oxley Act of 2002, 15 U.S.C. § 78p(a) (2012).

²⁹ Securities Exchange Act of 1934, § 10, 15 U.S.C. § 78j(b) (2012).

³⁰ *Cf. Chiarella v. United States*, 445 U.S. 222, 227-29 (1980) (stating that a corporation's officers and directors must disclose material inside information or abstain from trading in the firm's shares under Rule 10b-5 because they are in a relationship of trust and confidence with the firm's shareholders).

³¹ *See* DONALD C. LANGEVOORT, INSIDER TRADING REGULATION 72-73 (1991).

³² 17 C.F.R. § 240.10b-5(b).

facts” are those to which a “reasonable man would attach importance . . . in determining his choice of action in the transaction in question.”³³ While this definition would appear to suggest that any valuable information is material, the Supreme Court has also held that information does not become material merely because an insider can financially benefit at the expense of other shareholders from not disclosing it.³⁴ Moreover, lower courts have been reluctant to find information material unless the announcement of that information would have caused the stock price to move sharply.³⁵ As a result, insiders can profit legally by trading on many types of valuable, “sub-material” information.³⁶

Second, a prohibition on trading on “material” nonpublic information may not always deter such trading. The SEC has limited resources, making it difficult for the agency to monitor the hundreds of thousands of trades conducted by insiders each year.³⁷ The probability of detection and punishment is often very low, even though the trade-disclosure rules imposed

³³ SEC v. Tex. Gulf Sulphur Co., 401 F.2d 833, 849 (2d Cir. 1968) (quoting List v. Fashion Park, Inc., 340 F.2d 457, 462 (2d Cir. 1965)). In interpreting the term “material” under a related statute, the Supreme Court provided a similar definition. See TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976) (“An omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.”).

³⁴ See Basic Inc. v. Levinson, 485 U.S. 224, 240 n.18 (1988) (citing Pavlidis v. New England Patriots Football Club, Inc., 737 F.2d 1227, 1231 (1st Cir. 1984), for the proposition that “[a] fact does not become more material to the shareholder’s decision because it is withheld by an insider, or because the insider might profit by withholding it”).

³⁵ See Fried, *Reducing the Profitability*, *supra* note 10, at 336.

³⁶ See ROBERT CHARLES CLARK, CORPORATE LAW 507-08 (1986) (noting that managers may have access to bits of information that are not important enough individually to be considered legally material but that, in the aggregate, are very valuable); Donald C. Langevoort, *Rereading Cady, Roberts: The Ideology and Practice of Insider Trading Regulation*, 99 COLUM. L. REV. 1319, 1335 (1999) (“Insiders at almost all times have the advantage of superior insight and a sense of which way things are going even if they do not possess a fact that a court would call material and nonpublic.”).

One might argue that the high bar for “materiality” reflects a judgment that there is no cost to investors when insiders trade on certain kinds of private information. But from an economic perspective, there is little difference between trading on material information and trading on sub-material information, as participants on both sides of the insider-trading debate have long recognized. See, e.g., Carlton & Fischel, *supra* note 22, at 861 (concluding that “[f]or purposes of analyzing whether insider trading is beneficial or detrimental, nothing turns on whether a particular trade is illegal”); Reinier Kraakman, *The Legal Theory of Insider Trading Regulation in the United States* (noting that both legal and illegal insider trading reduce returns for outsiders, decrease liquidity, and curtail the incentive for outsiders to invest in information acquisition), in EUROPEAN INSIDER DEALING 39, 48-49 (Klaus J. Hopt & Eddy Wymeersch eds., 1991). A more likely explanation for the adoption of a high materiality bar for Rule 10b-5 is that the litigation and transaction costs of subjecting insiders—who always possess inside information—to a low bar would exceed the benefits of reducing their ability to engage in insider trading.

³⁷ See Fried, *Reducing the Profitability*, *supra* note 10, at 331-35 (describing the impediments to the SEC’s successful investigation of potential violations of insider-trading laws).

on insiders are relatively strict. The fact that insiders are often found to have violated Rule 10b-5 indicates that deterrence is far from perfect.³⁸

2. Section 16(a)'s Trade-Disclosure Rule

Because Rule 10b-5 by itself cannot prevent insiders from trading on valuable inside information, it is complemented by a trade-disclosure rule: Section 16(a) of the 1934 Act. Section 16(a) requires top executives, directors, and any person owning more than 10% of the shares of a publicly traded firm (a "10% shareholder") to report the details of each purchase and sale of the firm's shares after the transaction.³⁹

Before 2002, Section 16(a) required insiders to report most of their trades by the tenth day of the following month, enabling them to wait as many as forty days before reporting these trades.⁴⁰ After it came to light that the executives of Enron and other troubled firms secretly sold shares on inside information, Congress amended Section 16(a) via the Sarbanes-Oxley Act of 2002 to require executives to report every trade to the SEC by the end of the second business day following the transaction.⁴¹

Section 16(a) complements Rule 10b-5 in two crucial ways. First, by requiring insiders to report the details of each trade, Section 16(a) increases the likelihood that a trade on material inside information in violation of Rule 10b-5 will be investigated and the offending insider will be sanctioned. The increased probability of sanction strengthens Rule 10b-5's deterrence effect, reducing the likelihood that an insider will trade on material inside information. Second, whether an insider trades on material or valuable but sub-material information, a Section 16(a) report alerts public investors within two days of the trade to the possibility that the insider has private information indicating that the stock is mispriced. Investors may use this information to adjust the price at which they are willing to buy or sell shares. This price adjustment, in turn, reduces the insider's ability to use

³⁸ In 2007, former Countrywide Chief Executive Officer Angelo Mozilo reported dozens of trades pursuant to Section 16(a). *See, e.g.*, Countrywide Fin. Corp., Statement of Changes in Beneficial Ownership (Form 4) (Jan. 5, 2007) (on file with Author); Countrywide Fin. Corp., Statement of Changes in Beneficial Ownership (Form 4) (July 25, 2007) (on file with Author). Mozilo later agreed to pay \$45 million to settle SEC insider-trading charges that implicated these trades. Press Release, SEC, Former Countrywide CEO Angelo Mozilo to Pay SEC's Largest-Ever Financial Penalty Against a Public Company's Senior Executive (Oct. 15, 2010), *available at* <http://www.sec.gov/news/press/2010/2010-197.htm>.

³⁹ Securities Exchange Act of 1934, § 16(a), 15 U.S.C. § 78p(a) (2012).

⁴⁰ *Id.*

⁴¹ Pub. L. No. 17-204, § 403(a), 116 Stat. 745, 788 (2002) (current version at 15 U.S.C. § 78p(a)(2)(C) (2012)).

inside information to profit on subsequent, post-disclosure transactions, thereby diminishing his insider-trading profits.

To be sure, insiders can still profit from their access to inside information notwithstanding Section 16(a).⁴² Among other things, insiders can trade secretly for two days without facing any price adjustment due to trade disclosure. However, absent Section 16(a)'s trade-disclosure requirement, insiders' ability to profit from trading on inside information would be far greater.

II. INSIDER BUYING VIA THE CORPORATION

Having seen how insiders are subject to various insider-trading rules, including the two-day disclosure rule of Section 16(a), we will now see why insiders have an incentive to use open-market repurchases (OMRs) to engage in indirect insider trading. Section A describes the growing use of OMRs to distribute cash to shareholders. Section B describes the insider-trading regulations applicable to firms conducting OMRs and explains why they are more lax than the insider-trading regulations imposed on insiders themselves. Section C shows that insiders have an incentive to exploit these relaxed regulations to cause their firms to buy stock at a cheap price. Section D provides considerable evidence that insiders frequently engage in such "bargain" repurchases.

A. *Open Market Repurchases*

Publicly traded U.S. firms generate hundreds of billions of dollars in earnings annually.⁴³ Each year, boards must decide how much, if any, of their retained earnings should be distributed to shareholders rather than be reinvested in the firm. Boards must also decide the form that such distribution should take: dividends, repurchases, or a combination of both.⁴⁴

⁴² Cf. Lauren Cohen, Christopher Malloy & Lukasz Pomorski, *Decoding Inside Information*, 67 J. FIN. 1009, 1024 (2012) (finding that "opportunistic" corporate insiders make abnormal returns on their trades even though the median trade was reported within three days). In unreported results, the authors found that corporate insiders' ability to generate abnormal trades declined (but did not disappear) after 2002, when the two-day disclosure rule for Section 16(a) was adopted. See Email from Christopher Malloy, Professor of Bus. Admin., Harvard Bus. Sch., to Author (May 24, 2012, 3:54 PM) (on file with Author).

⁴³ See Gustavo Grullon & Roni Michaely, *Dividends, Share Repurchases, and the Substitution Hypothesis*, 57 J. FIN. 1649, 1655 tbl.I (2002) (reporting annual aggregate earnings of select U.S. firms from 1972 through 2000).

⁴⁴ See Douglas J. Skinner, *The Evolving Relation Between Earnings, Dividends, and Stock Repurchases*, 87 J. FIN. ECON. 582, 592 fig.3 (2008) (comparing the percentages of firms that paid dividends, firms that repurchased shares, and firms that did both from 1980 to 2005).

Repurchases can provide a number of benefits that dividends cannot. In particular, repurchases enable many shareholders to avoid taxable income (by not selling their shares), permit the firm to acquire shares for employee stock option plans, and can increase liquidity.⁴⁵ Not surprisingly, share repurchases have become increasingly common, and they exceed dividends as a form of cash payout.⁴⁶ Over 90% of U.S. public firms that distribute cash engage in repurchases.⁴⁷ In 2007, S&P 500 firms distributed almost \$600 billion through repurchases,⁴⁸ and total marketwide repurchases reportedly reached almost \$1 trillion.⁴⁹ The overwhelming majority of repurchases take the form of an OMR, in which the firm buys its own stock on the market through a broker.⁵⁰

B. Regulation of OMRs

We now turn to the insider-trading regulations applicable to firms conducting OMRs. They include (1) an announcement requirement; (2) Rule 10b-5's prohibition against repurchasing shares on material nonpublic information; and (3) post-repurchase disclosure requirements.⁵¹

⁴⁵ See Jesse M. Fried, *Informed Trading and False Signaling with Open Market Repurchases*, 93 CALIF. L. REV. 1323, 1328, 1336-40 (2005) [hereinafter Fried, *Informed Trading*] (exploring and analyzing the reasons for the popularity of repurchases).

⁴⁶ See Skinner, *supra* note 44, at 582-83 n.1 (reporting that, by 2004, repurchases exceeded dividends).

⁴⁷ See *id.* at 583 (explaining that, by 2005, only 7% of firms paid dividends and did not distribute any cash through repurchases).

⁴⁸ STANDARD & POOR'S, *Buybacks Set Record of \$589 Billion in 2007*, in 2 MORNING BRIEFING 3, 3 (Apr. 7, 2008), available at https://reports.standardandpoors.com/aidata/dynamic/jolt_040708noon.pdf.

⁴⁹ Paul A. Griffin & Ning Zhu, *Accounting Rules? Stock Buybacks and Stock Options: Additional Evidence*, 6 J. CONTEMP. ACCT. & ECON. 1, 1 (2010).

⁵⁰ See Monica L. Banyo et al., *Errors in Estimating Share Repurchases*, 14 J. CORP. FIN. 460, 460 (2008) (noting that, by value, 89% of repurchases were OMRs). Most other repurchases take the form of a repurchase tender offer (RTO), in which the firm offers to buy back its own stock directly from shareholders, usually at a premium over the market price. RTOs can also be used for insider trading via the corporation. See generally Jesse M. Fried, *Insider Signaling and Insider Trading with Repurchase Tender Offers*, 67 U. CHI. L. REV. 421 (2000) (describing RTOs and explaining how they are a particularly effective vehicle for insider trading by a firm's insiders).

⁵¹ Firms trading in their own shares are also subject to the antimanipulation provisions of Section 9(a)(2) of the 1934 Act, including the Rule 10b-18 safe harbor for firms repurchasing shares. See Fried, *Informed Trading*, *supra* note 45, at 1341-42 (discussing 15 U.S.C. § 78i(a)(2) (2012) and 17 C.F.R. § 240.10b-18 (2013) respectively). These rules do not reduce a corporation's ability to trade on inside information, *id.* at 1342, so I do not discuss them here.

1. Announcement Requirement

Before it can begin buying back shares in an OMR, a firm traded on NASDAQ or another stock exchange is required to announce its board's decision to approve an open-market buyback program.⁵² But such an announcement need not provide specific details about the program.⁵³ A firm is not required to indicate the number or dollar amount of shares to be repurchased. Nor must the firm indicate the expiration date of its buyback program.⁵⁴ Even if a firm voluntarily indicates a repurchase target, it will typically state that actual repurchases will depend on market conditions.⁵⁵ As a result, firms do not commit—and are not obligated—to buy back any stock.⁵⁶ In fact, one study found that almost 30% of firms announcing repurchases do not buy back a single share during the fiscal year in which the repurchase announcement occurs, with about 15% not buying back any shares within four fiscal years of the announcement year.⁵⁷

2. Rule 10b-5

As discussed in Section I.B, Rule 10b-5 requires that a firm's insiders, because they are considered to owe a preexisting fiduciary duty to the firm's shareholders, disclose any material nonpublic information that they possess or abstain from trading in the firm's shares. The SEC takes the position

⁵² See, e.g., NASDAQ RULE 5250(b)(1) (2014) (requiring prompt disclosure of any material information that would reasonably be expected to affect the value of the securities, including repurchase plans).

⁵³ Cf. Clifford P. Stephens & Michael S. Weisbach, *Actual Share Repurchases in Open-Market Repurchase Programs*, 53 J. FIN. 313, 317 (1998) (describing how over 130 of the 944 OMR announcements made between 1981 and 1990 had to be excluded from the study's initial sample because they were too vague).

⁵⁴ Michael Simkovic, *The Effect of Mandatory Disclosure on Open-Market Stock Repurchases*, 6 BERKELEY BUS. L.J. 96, 109 (2009).

⁵⁵ See David L. Ikenberry & Theo Vermaelen, *The Option to Repurchase Stock*, FIN. MGMT., Winter 1996, at 9, 12 (explaining that, by indicating that actual repurchases will depend on "market conditions," managers give themselves the option to repurchase stock if it turns out to be cheap).

⁵⁶ *Id.* at 10 (explaining that the lack of commitment to buy shares in the repurchase announcement obscures the managers' actual intentions).

⁵⁷ See Utpal Bhattacharya & Stacey Jacobsen, *The Share Repurchase Announcement Puzzle: Theory and Evidence* 3-4 (Nov. 2013) (unpublished manuscript), available at <http://ssrn.com/abstract=250049> (noting that 27% of the firms announcing repurchases in the study's 1985 to 2012 sample appear *not* to have repurchased any stock in the same fiscal year as the announcement, and 15% do not repurchase any stock within four fiscal years following the announcement year or before dropping out of Compustat).

that Rule 10b-5 also applies to a firm buying its own shares.⁵⁸ The doctrinal basis for the SEC's position, however, is somewhat shaky: although a corporation's insiders clearly owe a fiduciary duty to shareholders, the corporation itself may not.⁵⁹ Nevertheless, I assume here that a firm, like its insiders, is prohibited by Rule 10b-5 from buying its own shares while in possession of material inside information.⁶⁰

However, as we saw in Section I.B, even if Rule 10b-5 were to apply to a firm when it repurchases shares, it cannot by itself prevent trading on all valuable inside information.⁶¹ First, the courts' high materiality threshold permits trading on many types of important but sub-material information.⁶² Second, a prohibition against trading on "material" nonpublic information may not always deter such trading because of detection and enforcement problems.⁶³

As noted earlier, detecting a violation of Rule 10b-5 by a firm's insiders is difficult even though they must report their trades under Section 16(a).⁶⁴ As discussed below, the trade-disclosure rules for the firm itself are more lax than Section 16(a)'s disclosure requirement for insiders. Thus, it is even more difficult to detect a violation of Rule 10b-5 by a firm that repurchases its own shares while in possession of material inside information.

3. Repurchase-Disclosure Rules

A firm buying its own shares on the open market is not subject to Section 16(a)'s two-day disclosure requirement; that requirement applies only to firm insiders, not to the firm itself.⁶⁵ Indeed, before 2003, a firm did not have to disclose *any* information regarding repurchases.⁶⁶ Since 2003, however, the SEC has required a repurchasing firm to report, in its quarterly

⁵⁸ See Mark J. Loewenstein & William K.S. Wang, *The Corporation as Insider Trader*, 30 DEL. J. CORP. L. 45, 70-72 (2005).

⁵⁹ See *id.* at 47-53 (describing the conflicting decisions on the question of whether a corporation owes a state-law fiduciary duty to its shareholders when it repurchases its own stock, and the implications of those conflicting decisions for the applicability of Rule 10b-5 to a corporation trading in its own shares).

⁶⁰ If Rule 10b-5 were interpreted to *permit* a firm to repurchase its shares on material inside information, the problem of indirect insider trading described in this Article would be even more severe.

⁶¹ See *supra* subsection I.B.1.

⁶² See *id.*

⁶³ See *id.*

⁶⁴ See *id.*

⁶⁵ See *supra* subsection I.B.2.

⁶⁶ See Fried, *Informed Trading*, *supra* note 45, at 1340-41 (comparing the pre- and post-2003 SEC reporting requirements for share repurchases).

Form 10-Q (or Form 10-K) filing with the SEC, the number of shares repurchased in each month of that quarter and the average price paid for each share.⁶⁷ Because such filings can be made a month or so after the end of the quarter, investors cannot be expected to learn about share repurchases in the prior quarter until one to four months after they occur.⁶⁸

It should be easy to see that the SEC's 2003 trade-disclosure rules for a firm repurchasing its own shares are more lax than those applied to the firm's insiders in two respects. First, individual transaction details need not be disclosed.⁶⁹ A firm's ability to hide the details of each trade makes it difficult to determine whether a particular trade was illegal because the firm possessed material inside information at the time of the transaction. Trades on material inside information are therefore more likely to occur.

Second, while insiders must disclose a trade within two days, a firm repurchasing its own shares can wait months to report the transactions. As a result, investors cannot use the information about the actual value of the firm's stock that would be signaled by the repurchase disclosures to adjust their assessment of the stock's value until long after this information becomes stale. The firm thus has months to trade secretly on inside information without facing any adjustment in the stock price arising from the disclosure of its trades.

C. Insiders' Incentive to Engage in Bargain Repurchases

We have just seen that a firm buying its own shares in the market is subject to much less stringent trade-disclosure requirements than a firm insider who personally buys those shares. We will now see that insiders have an incentive to exploit these weak disclosure requirements to use repurchases for indirect insider trading.

Our focus will be on a "bargain repurchase"—a buyback conducted when those controlling the firm believe that the stock price is less than the stock's actual value. A bargain repurchase transfers value from selling shareholders

⁶⁷ See Purchases of Certain Equity Securities by the Issuer and Others, 68 Fed. Reg. 64,952, 64,961 (Nov. 17, 2003) (amending 17 C.F.R. pts. 228, 229, 240, 249, 270 & 274) (codified at 17 C.F.R. § 240.10b-18 (2013)).

⁶⁸ See Form 10-Q, SEC, <http://www.sec.gov/answers/form10q.htm> (last visited Feb. 21, 2014) (stating that the Form 10-Q filing deadline is 40–45 days after the end of the quarter and that the Form 10-K filing deadline is 60–90 days after the end of the year).

⁶⁹ See Item 703 of Regulation S-K, 17 C.F.R. § 229.703 (2013) (requiring public companies to provide in their quarterly filings a table showing, on a month-by-month basis, the total number of shares repurchased during the covered quarter and the average price per share).

to nonselling shareholders pro rata.⁷⁰ Thus, to the extent insiders own shares in the firm and decline to sell their shares at a cheap price, they will benefit from a bargain repurchase.

Insiders of U.S. firms announcing repurchases tend to own a substantial fraction of the firms' shares before the repurchase—an average of 15%-20%⁷¹—which is roughly the same as the average insider ownership across all firms.⁷² Thus, when insiders know that stock prices are low, they have a strong incentive to conduct a bargain repurchase to transfer value from selling shareholders to themselves and other nonselling shareholders.

To see how a bargain repurchase transfers value to insiders and other nonselling shareholders, consider ABC Corporation (ABC). Suppose that ABC currently has six shares outstanding and that it will be liquidated on a future Liquidation Date. Five shares are held by public shareholders; one share is held by Insider. Assume that ABC does not issue any dividends or sell any equity before Liquidation Date.

There are two scenarios:

No-Transaction Scenario: If ABC does not repurchase any of its equity prior to Liquidation Date, it will distribute \$60 to the holders of its six shares at Liquidation Date. The no-transaction value of each of ABC's six shares at Liquidation Date is thus \$10.

Repurchase Scenario: Now suppose that ABC conducts a repurchase before Liquidation Date when the stock trades at \$6 (\$4 less than its actual value of \$10), buying back a single share at that price. Assume that the \$6 spent on the repurchase reduces ABC's Liquidation-Date value from \$60 to \$54 (no economic value is created or destroyed by the repurchase).

⁷⁰ See Fried, *Informed Trading*, *supra* note 45, at 1344-47 (explaining how a bargain repurchase is economically equivalent to nonselling shareholders buying stock at a cheap price from selling shareholders and then receiving a dividend from the firm equal to the amount paid to selling shareholders). When a firm buys stock at a price below its actual value, the precise distributional effects depend on whether the selling shareholders would have otherwise sold their shares to new investors for the same price. If so, the selling shareholders cannot be said to "lose" any value as a result of the bargain repurchase. Instead, the bargain repurchase deprives would-be new investors of a gain. For simplicity, however, I assume that it is the selling shareholders that lose money as a result of the bargain repurchase. This assumption does not affect the analysis.

⁷¹ See William J. McNally, *Open Market Stock Repurchase Signaling*, FIN. MGMT., Summer 1999, at 55, 59 tbl.1 (finding that insiders in repurchasing firms own an average of 18% of the firm's shares before the repurchase announcement); Nikos Vafeas, *Determinants of the Choice Between Alternative Share Repurchase Methods*, 12 J. ACCT. AUDITING & FIN. 101, 112-13, tbl.1 (1997) (finding that insiders in repurchasing firms own an average of 15.0% to 22.6% of firm equity). These figures do not include insiders' stock options, which effectively increase their proportional ownership of a firm's equity.

⁷² See Holderness, *supra* note 11, at 1382-83 & tbl.1 (finding average insider ownership in a sample of publicly traded U.S. firms to be in the range of 24% to 32%).

When ABC repurchases a share, Insider does not sell because he is aware that the stock is underpriced. Thus, the repurchased share is acquired from a public shareholder. At Liquidation Date, the value of each of ABC's five remaining shares, including the one owned by Insider, is \$10.80 (\$54/5).

By assumption, the economic value created by the firm in both scenarios is the same. In the No-Transaction Scenario, \$60 flows to all the shareholders at Liquidation Date. In the Repurchase Scenario, \$6 flows to one shareholder during the repurchase and \$54 flows to the remaining shareholders at Liquidation Date.⁷³ In both cases, there is \$60 of economic value flowing to shareholders.

But the bargain repurchase shifts value from public shareholders as a group to Insider. In the No-Transaction Scenario, Insider gets \$10 and public shareholders get \$50. In the Repurchase Scenario, Insider gets \$10.80 and public shareholders get \$49.20 (\$43.20 received by the four nonselling public shareholders plus \$6 received by the selling public shareholder). Thus, Insider reaps an extra \$0.80 even though no economic value is created by the repurchase. The results are summarized in Table 1 below.

Table 1: Value-Shifting Effect of Bargain Repurchase

	Total Value	All Public	Nonselling Public	Selling Public	Insider
No-Transaction	\$60.00	\$50.00	\$50.00 (5 x \$10.00)	n/a	\$10.00
Repurchase	\$60.00	\$49.20	\$43.20 (4 x \$10.80)	\$6.00 (1 x \$6.00)	\$10.80

D. Evidence of Bargain Repurchases

Having seen that insiders have an incentive to engage in bargain repurchases, we now turn to the considerable evidence that they actually engage in such indirect insider trading. This evidence includes (1) insiders' own statements and behavior and (2) stock-price movements following repurchases.

1. Executives' Own Statements and Behavior

Insiders admit that they frequently use repurchases to buy cheap stock indirectly. Economists who conducted a 2005 survey of executives regarding

⁷³ All examples in this Article ignore the time value of money, or alternatively, assume it is zero. This assumption, made purely for convenience, does not affect the analysis.

firms' payout policies noted that "[t]he most popular response for all repurchase questions on the entire survey is that firms repurchase when their stock is a good value, relative to its true value: 86.4% of all firms agree or strongly agree with this supposition."⁷⁴ Indeed, some firms openly state that their share-repurchase programs are designed to acquire stock at a low price for the benefit of long-term shareholders.⁷⁵

Until the SEC began requiring limited disclosure of OMR transactions in 2003, it was difficult for economists to confirm that insiders of U.S. firms used inside information to time actual repurchase transactions. But a relatively recent study using post-2003 data found that firms systematically buy stock at low prices within each quarter, often using inside information to redistribute large amounts of value from selling to nonselling shareholders.⁷⁶ This study also found that insiders' tendency to exploit information in timing repurchases increases with insider equity ownership.⁷⁷

2. Post-Repurchase Stock Returns

Stock price movements following repurchases also suggest that the desire to engage in indirect insider trading drives many repurchases. Several studies have found that U.S. companies announcing OMRs experience, on average, cumulative abnormal (market-adjusted) returns of approximately 25% over the next four years.⁷⁸ These findings suggest that firms announcing

⁷⁴ Alon Brav et al., *Payout Policy in the 21st Century*, 77 J. FIN. ECON. 483, 514 (2005).

⁷⁵ See, e.g., *UnitedHealth Group Board Increases Shareholder Dividend 32%; Renews Share Repurchase Program*, UNITEDHEALTH GROUP (June 5, 2013), available at <http://www.unitedhealthgroup.com/Newsroom/Articles/Feed/UnitedHealth%20Group/2013/0605shareholderdividend.aspx?p=1&> (reporting that the "renewed share repurchase program strengthens and extends our ability to repurchase shares at favorable prices for the benefit of long term shareholders").

⁷⁶ See Amedeo De Cesari et al., *The Effects of Ownership and Stock Liquidity on the Timing of Repurchase Transactions*, 18 J. CORP. FIN. 1023, 1034 (2012) ("Overall we find that companies time OMRs both by buying shares at a relatively low price within each month in which the company repurchases shares and by buying more shares during months when prevailing market prices are relatively low.").

⁷⁷ *Id.* at 1038-39.

⁷⁸ See, e.g., Konan Chan et al., *Economic Sources of Gain in Stock Repurchases*, 39 J. FIN. & QUANTITATIVE ANALYSIS 461, 472-73 & tbl.5 (2004) (finding, in a study of firms announcing OMRs, abnormal returns of 6.68% in the year following the announcement and cumulative abnormal returns of 23.56% over the subsequent four years); see also Urs Peyer & Theo Vermaelen, *The Nature and Persistence of Buyback Anomalies*, 22 REV. FIN. STUD. 1693, 1698-1701 & tbl.2 (2009) (finding, in a sample of 3481 OMR announcements between 1991 and 2001, 24.25% cumulative abnormal returns over the four years following the announcements). Such large abnormal post-announcement returns are also found outside the United States. See Alberto Manconi et al., *Buybacks Around the World* 21-23 (INSEAD, Working Paper No. 2013/101/FIN, 2013), available at <http://ssrn.com/abstract=2330807> (finding, in a large sample of non-U.S. firms announcing repurchases, similar abnormal returns over the four years following repurchase announcements).

OMRs were, on average, 25% undervalued at the time of the OMR announcement. These studies have led economists to conclude that repurchasing stock at a low price has become a widespread practice.⁷⁹

As noted earlier, many firms announcing OMRs do not actually buy back any stock after the announcement.⁸⁰ There are two reasons why managers may make repurchase announcements even though they have no concrete plans to repurchase any stock. First, insiders might announce a repurchase program with no intention to repurchase any stock to boost the stock price so that they can unload their own shares at a higher price.⁸¹ Second, insiders might announce OMRs to give themselves the option to acquire stock at a low price in the future. If the stock price does not subsequently turn out to be low, relative to its actual value, then insiders will not repurchase stock. Thus, one should not be surprised if any given repurchase announcement is not followed by an actual repurchase of shares.

Because there is no reason to believe that firms announcing but then not conducting OMRs are undervalued, we would expect the subset of firms that announce OMRs and then actually repurchase shares to be more undervalued than the entire set of firms that announce OMRs. Indeed, one study found that certain firms conducting OMRs—firms with a high book-to-market ratio that announced repurchases *and* subsequently repurchased more than 4% of their shares in the post-announcement year—experienced abnormal returns of around 57% in the four years following the announcement.⁸² By contrast, firms that did not subsequently repurchase shares did not appear to experience post-announcement abnormal returns.⁸³ These post-repurchase returns constitute strong evidence (along with insiders' own statements and behavior) that insiders often use repurchases to buy underpriced stock indirectly.

The fact that many OMR announcements occur when the stock is not currently undervalued makes it easier for insiders to use OMRs to indirectly buy cheap stock. In particular, the use of OMR announcements for many

⁷⁹ See, e.g., Malcom Baker & Jeffrey Wurgler, *Market Timing and Capital Structure*, 57 J. FIN. 1, 28-29 (2002) (reporting that equity market timing—having the firm buy shares at a low price and issue shares at a high price—is an “important aspect” of actual corporate finance practice).

⁸⁰ See *supra* subsection II.B.1.

⁸¹ See Fried, *Informed Trading*, *supra* note 45, at 1351-57 (explaining that executives can use repurchase announcements for false signaling and providing anecdotal accounts of such false signaling); see also Konan Chan et al., *Share Repurchases as a Potential Tool to Mislead Investors*, 16 J. CORP. FIN. 137, 139 (2010) (finding evidence consistent with executives of some poorly performing firms making share repurchase announcements without an intention to repurchase shares).

⁸² Konan Chan et al., *Do Managers Time the Market? Evidence from Open-Market Share Repurchases*, 31 J. BANKING & FIN. 2673, 2686-88 & tbl.6 (2007).

⁸³ *Id.* at 2688.

different purposes reduces the undervaluation-signaling effect of any given OMR announcement. This, in turn, causes the market to react relatively weakly to such an announcement. One study found that OMR announcements were associated with short-term abnormal price increases of only about 2%.⁸⁴ The more muted the market's response to a repurchase announcement, the greater the profits insiders can reap by repurchasing underpriced stock.⁸⁵

III. INSIDER SELLING VIA THE CORPORATION

Part II explained that insiders use OMRs to engage in indirect insider buying via the firm. This Part discusses the use of at-the-market (ATM) issuances to engage in indirect insider selling via the firm. Just as insiders can use an OMR to buy underpriced stock through their firm, they can also use an ATM to sell overpriced shares through their firm. Section A describes the growing use of ATMs. Section B discusses the relatively lax insider-trading regulations applicable to firms conducting ATMs. Section C explains why insiders have an incentive to exploit these relatively lax regulations to engage in indirect insider trading.

A. *At-the-Market Issuances*

The typical publicly traded firm issues a considerable amount of shares between the time it goes public and the time it ceases trading.⁸⁶ From 1993

⁸⁴ See Peyer & Vermaelen, *supra* note 78, at 1697-98 & tbl.1 (finding that, in a sample of OMR announcements from 1991 to 2001, there were average abnormal returns of 2.39% in the three days around the announcement). Not surprisingly, the market reacts more strongly to OMR announcements when insiders own more stock and the likelihood of indirect insider trading is higher. See Elias Raad & H.K. Wu, *Insider Trading Effects on Stock Returns Around Open-Market Stock Repurchase Announcements: An Empirical Study*, 18 J. FIN. RES. 45, 56 (1995) (finding a positive association between insider stock ownership and market reaction to repurchase announcements).

⁸⁵ The use of OMRs to engage in indirect insider trading would be expected, everything else equal, to increase the bid-ask spread. See Gustavo Grullon & David L. Ikenberry, *What Do We Know About Stock Repurchases?*, 13 J. APPLIED CORP. FIN. 31, 42 (2000). While a lack of adequate disclosure of U.S. firm trades makes it difficult to study the effect of OMRs on the bid-ask spread as shares are being repurchased, studies of OMRs in foreign markets with better disclosure requirements find that the bid-ask spread widens when firms repurchase their own shares in the market. See Paul Brockman & Dennis Y. Chung, *Managerial Timing and Corporate Liquidity: Evidence from Actual Share Repurchases*, 61 J. FIN. ECON. 417, 438 (2001) (Hong Kong); Edith Ginglinger & Jacques Hamon, *Actual Share Repurchases, Timing and Liquidity*, 31 J. BANKING & FIN. 915, 936 (2007) (France).

⁸⁶ See Eugene F. Fama & Kenneth R. French, *Financing Decisions: Who Issues Stock?*, 76 J. FIN. ECON. 549, 560 (2005) (noting that most firms issue shares, repurchase shares, or do both every year after their initial public offerings).

to 2002, an average of 66.5% of large firms made *net* stock issues—issuances less repurchases—each year during that period.⁸⁷ Strikingly, these net stock issues averaged 7.5% of assets, which is on the same order of magnitude as net debt issuances.⁸⁸

A seasoned equity offering (SEO), in which a firm sells stock to investors for cash, is one of the most important forms of equity issuance.⁸⁹ Until relatively recently, SEOs were almost always “firm-commitment”: the corporation arranges to sell a specified number of shares at a fixed price through an underwriter that guarantees to sell the shares at that price and then offers the shares to investors.⁹⁰ When the market learns of a firm-commitment SEO, the stock price tends to fall.⁹¹ The market’s reaction to SEO announcements is not surprising, as an issuance may signal that the stock is overvalued.

In part due to the adverse effect of firm-commitment SEOs on the stock price, firms have taken advantage of recent regulatory changes to issue stock via so-called “at-the-market” SEOs (ATMs).⁹² In an ATM, shares are sold directly (and quietly) on the market through a sales agent.⁹³ A firm need not—and typically does not—announce these sales as they are occurring, much as firms do not announce OMR transactions as they are occurring.

Indeed, ATMs are marketed as a way for firms to issue shares quickly when the price appears favorable without alerting the market to the issuance in real time⁹⁴ (which might cause the stock price to fall). As several securities

⁸⁷ *Id.* at 551, 564 tbl.4.

⁸⁸ *Id.* at 574, 577 tbl.6.

⁸⁹ Other types of stock issuances include issuances to employees exercising options and issuances to shareholders of a target firm in exchange for the target’s assets.

⁹⁰ See B. Espen Eckbo et al., *Security Offerings* (reporting that firm-commitment underwritings are “the primary choice of publicly traded U.S. firms” and explaining that an underwriter syndicate guarantees the proceeds of the issue), in 1 HANDBOOK OF CORPORATE FINANCE: EMPIRICAL CORPORATE FINANCE 233, 243 (B. Espen Eckbo ed., 2007).

⁹¹ See *id.* at 315-18 (surveying studies of firm-commitment SEOs in the United States and reporting that, on average, there are significantly negative stock-price reactions to announcements of these transactions).

⁹² See Matthew T. Billett et al., *At the Market (ATM) Offerings* 2 n.1, 5-6 (Nov. 12, 2013) (unpublished manuscript), available at <http://ssrn.com/abstract=2178052> (describing how regulatory changes in 2005 and 2008 led to ATM issuances increasing from 1% of total SEO value in 2008 to 10% of total SEO value in 2012).

⁹³ For a discussion of these offerings and their requirements, see James D. Small III et al., *The Resurgence of United States At-the-Market Equity Offerings to Raise Capital in Volatile Equity Markets*, 4 CAP. MARKETS L.J. 290, 291-300 (2009).

⁹⁴ See David M. Carter et al., *ATM Offerings—Flexible, Opportunistic Access to Capital*, MARTINDALE.COM (Oct. 25, 2010), available at http://www.martindale.com/securities-law/article_Troutman-Sanders-LLP_1171318.htm (claiming that ATM offerings permit “timely, opportunistic access to the capital markets” in part because of “[m]inimal real-time disclosure of sales activity”).

lawyers have put it: an ATM enables “the issuer [to] opportunistically take advantage of stock price movements.”⁹⁵

B. Regulation of ATMs

We now turn to consider the insider-trading regulations applicable to firms conducting ATMs, which are analogous to the insider-trading regulations applicable to firms conducting OMRs. The regulations include: (1) pretransaction filing requirements; (2) a prohibition on issuing shares when the firm is in possession of “material” nonpublic information; and (3) post-issuance disclosure requirements.

1. Filing Requirements

Before conducting an ATM, the firm must first have an effective shelf registration statement (which includes a prospectus) on file with the SEC.⁹⁶ In these disclosures, the firm must indicate the maximum number of shares to be sold or the maximum aggregate gross proceeds from such sales, and the sales agent.⁹⁷

However, these pretransaction disclosures do not provide much useful information to investors. First, these disclosures can be updated at any time to increase the ceiling on the number of shares to be sold. As a result, investors do not know the maximum number or value of shares that will actually be sold. Second, the filing of these disclosures does not compel the firm to enter into a single transaction. Thus, like an OMR announcement, an ATM filing gives a firm the option, but not the obligation, to trade in its shares on the open market.

2. No Trading on Material Inside Information

Various provisions of the federal securities laws require a firm selling its own shares in a public offering (including an ATM) to disclose any material nonpublic information it possesses.⁹⁸ Thus, while there may be some legal uncertainty about whether a firm *buying* its shares in an OMR must disclose

⁹⁵ Small et al., *supra* note 93, at 291.

⁹⁶ *Id.* at 295-96.

⁹⁷ *Id.* at 296.

⁹⁸ See, e.g., Securities Act of 1933, § 12(a)(2), 15 U.S.C. § 77l(a)(2) (2012) (providing shareholders a right to sue for a misstatement or omission of material fact in a prospectus used to offer or sell securities to the public).

material nonpublic information,⁹⁹ the requirement for a firm *selling* its shares via an ATM is considered to be unambiguous.¹⁰⁰

However, as we saw in the case of OMRs, a prohibition on a firm trading in its own shares on material inside information cannot, by itself, prevent the firm from exploiting valuable inside information when trading in its own stock.¹⁰¹ First, the high threshold for “materiality” actually applied by the courts allows legal trading on many types of valuable but sub-material information. Second, a prohibition on trading on material nonpublic information may not always deter such trading because of the difficulties of detection and proof—difficulties that are exacerbated when (as in the case of OMRs) individual trades need not be disclosed. As discussed below, the trade-disclosure rules applicable to firms conducting ATMs are, if anything, even more lax than those applicable to firms conducting OMRs.

3. Trade-Disclosure Rules for ATMs

Like firms conducting OMRs, firms conducting ATMs need not publicly disclose any information about ATM transactions until after the end of the quarter in which the transactions took place.¹⁰² But while firms conducting OMRs must disclose the number of shares repurchased in each month of the preceding quarter and the average price paid for each share,¹⁰³ no such breakdown is required for ATMs. In general, firms need report, for the preceding quarter, only the total number of shares issued and the proceeds from those sales.¹⁰⁴

As in the case of OMR trade-disclosure rules, ATM trade-disclosure rules are more lax than those applied to insiders themselves in two ways. First, the information provided does not include the dates and prices of individual trades. This makes it difficult to determine whether a particular trade was illegal—that is, whether the firm was in possession of material

⁹⁹ See *supra* subsection II.B.2.

¹⁰⁰ See Small et al., *supra* note 93, at 301 (noting that if an issuer conducting an ATM possesses material nonpublic information it must suspend the ATM or reveal the information); see also Adam Fleisher et al., *Alternatives to Traditional Securities Offerings*, CLEARY GOTTLEB ALERT MEMO, Mar. 19, 2013, at 6, available at <http://www.cgsh.com/files/News/9fd96d45-9352-48b3-bf72-e7284f367c5a/Presentation/NewsAttachment/f789c15d-8619-4bc1-955f-aa630494a4/Alert%20Memo%20-%20Alternatives%20to%20Traditional%20Securities%20Offerings.pdf> (explaining that a domestic issuer in possession of material nonpublic information should suspend the program until the information is disclosed, typically via a press release coupled with a filing on a Form 8-K).

¹⁰¹ See *supra* subsection II.B.2.

¹⁰² See Small et al., *supra* note 93, at 302 (noting a general practice among firms conducting ATMs of disclosing information only on quarterly Form 10-Q filings).

¹⁰³ See *supra* subsection II.B.3.

¹⁰⁴ Small et al., *supra* note 93, at 302.

inside information at the time of the trade. As a result, trades on material inside information are more likely to occur.

Second, while insiders must disclose a trade within two days, firms buying or selling their shares can wait several months before publicly reporting their transactions. Accordingly, investors cannot easily use the information communicated by the firm's trades to adjust their valuation of the stock until long after the information has become stale. The firm thus can have months to trade stealthily on inside information without the public disclosure of its trades causing an adjustment in its stock price.

C. *Insiders' Incentive to Engage in Inflated-Price ATMs*

Having seen that a firm selling its own shares in the market is subject to more lax trade-disclosure requirements than an insider of the firm selling those shares, we now turn to examine insiders' incentive to use equity issuances to engage in indirect insider trading.

Our focus will be on inflated-price issuances—issuances conducted when the stock price exceeds the stock's actual pretransaction value. An inflated-price issuance transfers value from buying shareholders to nonbuying shareholders pro rata. Thus, insiders who conduct an inflated-price issuance (and decline to buy shares in the issuance) benefit to the extent they own shares in the firm. For instance, if insiders in a firm own 25% of the firm's equity before the issuance, they will capture 25% of the value transferred to nonbuying shareholders. Since, as noted earlier, average inside ownership in U.S. firms ranges between 24% and 32%,¹⁰⁵ the value transfer to insiders can be quite significant. In a firm where insiders own 25% of the equity before the issuance, they will capture 25% of the value transferred to nonbuying shareholders.

To see how an inflated-price equity issuance transfers value to insiders (and, incidentally, to other nonbuying shareholders), consider again ABC Corporation (ABC). Suppose that ABC currently has five shares outstanding and is liquidated on a future Liquidation Date. Four shares are held by public shareholders; one share is held by Insider. Assume that ABC does not issue any dividends or repurchase any equity before Liquidation Date.

There are two scenarios:

No-Transaction Scenario: If ABC does not issue any equity prior to Liquidation Date, it will distribute \$50 to the holders of its five shares at Liquidation Date. The no-transaction value of each of ABC's five shares at Liquidation Date is thus \$10 (\$50/5).

¹⁰⁵ See Holderness, *supra* note 11, at 1382-83.

Equity-Issuance Scenario: Now suppose that ABC conducts an equity issuance before Liquidation Date when the stock trades at \$16 (\$6 more than its pretransaction value of \$10), selling a single share at that price. Assume also that no economic value is created or destroyed by the equity issuance, so the \$16 received for the share increases ABC's Liquidation-Date value by \$16, from \$50 to \$66. Insider will refrain from purchasing the new share, knowing that it is overvalued. At Liquidation Date, the value of each of ABC's six shares, including that owned by Insider, is \$11 (\$66/6).

By assumption, the economic value created by the firm in both scenarios is the same. In the No-Transaction Scenario, \$50 flows to all the shareholders at Liquidation Date. In the Equity-Issuance Scenario, \$16 flows from shareholders during the issuance and \$66 flows back to shareholders at Liquidation Date, for a net outflow of \$50. In both cases, there is \$50 of net economic value to be allocated to shareholders.

However, the equity issuance shifts value from public shareholders as a group to Insider. In the No-Transaction Scenario, Insider gets \$10 and public shareholders get \$40. In the Equity-Issuance Scenario, Insider gets \$11 and public shareholders get \$39 (\$55-\$16). Thus, Insider reaps an extra \$1 even though no economic value is created by the equity issuance. The results are summarized in Table 2 below.

Table 2: Value-Shifting Effect of Inflated-Price Issuance

	Total Value	All Public	Nonbuying Public	Buying Public	Insider
No-Transaction	\$50.00	\$40.00	\$40.00 (4 x \$10.00)	n/a	\$10.00
Equity-Issuance	\$50.00	\$39.00	\$44.00 (4 x \$11.00)	-\$5.00 (1 x -\$5.00)	\$11.00

There is considerable evidence that insiders deliberately use equity issuances to transfer value from buying shareholders. For one thing, executives themselves acknowledge that they issue shares when they believe their firms' stock prices are "high."¹⁰⁶ In addition, a large body of studies has found that insiders tend to conduct traditional SEOs when their firms' shares are overpriced,¹⁰⁷ thereby enabling insiders to substantially boost the

¹⁰⁶ See John R. Graham & Campbell R. Harvey, *The Theory and Practice of Corporate Finance: Evidence from the Field*, 60 J. FIN. ECON. 187, 216 tbl.8 (2001) (reporting the results of a survey of 392 CFOs about their decisionmaking around capital structure).

¹⁰⁷ See, e.g., Tim Loughran & Jay R. Ritter, *The New Issues Puzzle*, 50 J. FIN. 23, 47 (1995) (examining 3702 SEOs between 1970 and 1990 and finding evidence that firms announce stock issues when their stock is grossly overvalued, the market does not revalue the stock appropriately,

value flowing to them and other nonbuying shareholders.¹⁰⁸ Importantly, and not surprisingly, the propensity to engage in inflated-price issuances appears to increase with insider equity ownership.¹⁰⁹

Although ATMs are relatively new, the evidence now emerging is consistent with insiders using private information to sell overvalued equity in ATMs. For example, one recent study found that ATMs are announced after significant stock price runups and that the market reacts negatively to their announcement.¹¹⁰ It also found that actual sales under ATM programs are effected after the stock price has recently risen and market conditions are thus relatively favorable.¹¹¹

IV. COSTS TO PUBLIC INVESTORS

As Part I explained, when insiders engage in direct insider trading, public investors are hurt in two ways: (1) value is systematically diverted from public investors to insiders; and (2) public investors lose additional value when the overall pie shrinks due to the weakening and distortion of insiders' incentives.

As this Part explains, indirect insider trading also hurts public investors in these two ways. Section A explains how indirect insider trading, like direct insider trading, systematically transfers value from public shareholders to insiders. Section B explains how indirect insider trading causes insiders to act in ways that destroy economic value.

and the stock remains substantially overvalued when the issue occurs); Jeffrey Pontiff & Artemiza Woodgate, *Share Issuance and Cross-Sectional Returns*, 63 J. FIN. 921, 921-22 (2008) (finding evidence of post-SEO stock underperformance for SEOs occurring between 1970 and 2003).

¹⁰⁸ See Ilona Babenko et al., *Agency Implications of Equity Market Timing 5* (May 9, 2012) (unpublished manuscript), available at <http://apps.olin.wustl.edu/firs/pdf/2012/2667.pdf> (reporting that firms that time their SEOs create an average additional three-year return for long-term shareholders of 3.21%).

¹⁰⁹ See Eric R. Brisker et al., *Executive Compensation Structure and the Motivations for Seasoned Equity Offerings*, 40 J. BANKING & FIN. 330, 331 (2014) (finding that managers owning relatively large amounts of equity are more likely to engage in inflated-price issuances than other managers); cf. Sudip Datta et al., *Executive Compensation Structure and Corporate Equity Financing Decisions*, 78 J. BUS. 1859, 1886-87 (finding, in a sample of 444 SEO announcements occurring between 1992 and 1999, that the market reacted more negatively to announcements by firms in which managers owned more equity).

¹¹⁰ See Billett et al., *supra* note 92, at 17-18 (finding, in a sample of ATMs between 2008 and 2012, that ATMs are announced following abnormal stock price increases and that their announcements are associated with an average negative abnormal stock decline of 3%).

¹¹¹ See *id.* at 23-24 (finding that more positive stock returns in the prior quarter lead to larger actual issuances in the current quarter).

A. *Value Diversion*

This Section (1) provides an estimate of the value diversion to insiders from indirect insider trading; (2) shows that this value diversion hurts public shareholders as much as value diversion via direct insider trading; and (3) explains why insiders bother to engage in indirect insider trading when direct insider trading appears to be a much more “efficient” strategy for diverting value.

1. The Amount of Value Diversion

Insiders systematically divert value from public investors through both bargain repurchases and inflated-price equity issuances. In prior work, I used publicly available data to form a crude estimate of insiders’ annual profits from bargain repurchases alone: between \$6 and \$7.5 billion. This amount is comparable to insiders’ profits from direct insider trading.¹¹² And, importantly, it does not include profits from inflated-price issuances.

A more recent study by Richard Sloan and Haifeng You provides additional evidence that insiders’ profits from bargain repurchases and inflated-price issuances are likely to be substantial.¹¹³ Sloan and You estimate that, over the last 40 years, an aggregate of \$2.2 trillion has been transferred to long-term shareholders through bargain repurchases and inflated-price issuances.¹¹⁴ That works out to about \$50 billion per year. If insiders were to capture 15% of that \$50 billion, their indirect insider-trading profits would be \$7.5 billion annually.

While the actual amount diverted may be greater or less than these rough estimates, it is likely that bargain repurchases and inflated-price ATMs together yield insiders at least several billion dollars per year.

As Section I.A explained, academics who favor insider trading argue that direct insider-trading profits are a reasonable form of compensation. Similarly, insiders’ ability to profit from indirect insider trading might be defended as a form of compensation for those controlling the firm—executives, directors, and large shareholders. But indirect insider-trading profits, like direct insider-trading profits, are a very odd form of compensation. Gains from direct or indirect insider trading are a function of access to inside information, not the creation of economic value. As explained below,

¹¹² See Fried, *Informed Trading*, *supra* note 45, at 1357-60 (deriving an estimate of insiders’ profits from bargain repurchases and explaining the limitations of the methodology).

¹¹³ See generally Richard G. Sloan & Haifeng You, *Wealth Transfers via Equity Transactions* (Feb. 15, 2013) (unpublished manuscript), available at <http://papers.ssrn.com/abstract=2218986>.

¹¹⁴ *Id.* at 3.

indirect insider trading, like direct insider trading, can be expected to reduce the value flowing to all shareholders over time by causing insiders to take steps that destroy economic value.

2. Are Indirect Insider-Trading Profits Different?

A reader may wonder whether a useful distinction can be drawn between direct and indirect insider-trading profits. In particular, while the former are captured only by insiders, the latter are shared pro rata with those public shareholders who do not sell when the firm conducts a bargain repurchase or buy when the firm conducts an inflated-price issuance. Thus, insiders gain from indirect insider trading only if certain public shareholders also benefit.

Indeed, it would be entirely correct to say that indirect insider trading increases the firm's long-term stock price and benefits the firm's long-term shareholders. When the firm buys shares at a low price, it increases the long-term value of all the remaining shares. When the firm sells shares at a high price, the firm increases the long-term value of all preexisting shares. In other words, indirect insider trading (unlike direct insider trading) appears to boost value for long-term shareholders. What could be wrong with that?

The answer is as follows: whether insider trading is done directly or indirectly via the firm, public shareholders buying and selling the firm's shares systematically lose. Thus, on average, public shareholders can expect to profit less from investing in the firm's shares. As public investors' expected returns decline, it is more difficult for a firm to raise equity capital in the public markets.

To see why direct and indirect insider trading have the same distributional effects for public investors as a whole, it might be helpful to consider again ABC Corporation. Suppose that, at the beginning and at the end of the year, Insider of ABC owns 20% of ABC's equity. Assume that Insider's personal trading does not affect ABC's per-share value. Consider two scenarios:

Scenario 1: Insider buys X shares and later sells X shares on inside information during the course of the year, generating direct insider-trading profits of \$2. Insider engages in no other purchases or sales, so Insider's proportional ownership is the same on December 31 as it is on January 1. Because there is no effect on ABC's value from Insider's trading, the only effect of Insider's use of private information is to shift \$2 from public investors trading in ABC's shares to Insider.

Scenario 2: Insider uses private information to have ABC buy 5X shares and sell 5X of its own shares during the course of the year. Assume that ABC does not engage in any other share transactions and that Insider does not personally trade. Thus, Insider's proportional interest remains at 20% at the end of the year, and those ABC shareholders not buying or selling shares during the year capture an extra \$10 as a result of this trading. ABC's per-share value increases from the beginning until the end of the year because the corporation has \$10 of extra cash and the number of shares outstanding does not change. Insider captures \$2, and the remaining \$8 goes to public shareholders holding their shares of ABC.¹¹⁵

These two scenarios are reflected in Table 3 below.

Table 3: ABC Insider-Trading Scenarios

	Insider	All Public	Nontrading Public Shareholders	Trading Public Shareholders	Share Value
Insider Makes \$2 Trading Directly	\$2.00	-\$2.00	\$0.00	-\$2.00	Same
Insider Has ABC Make \$10 Trading Profits	\$2.00	-\$2.00	\$8.00	-\$10.00	Higher

Although Scenario 2 leads to a higher share value for ABC than Scenario 1 (because it is ABC rather than Insider that engages in insider trading), there is no difference for public shareholder value in the aggregate. In both scenarios, Insider diverts \$2 from public investors buying or selling ABC's shares; public shareholders as a group are made worse off by \$2.

3. Why Bother with Indirect Insider Trading?

It would certainly seem simpler for an insider to engage in direct insider trading rather than to use the corporation for indirect insider trading. But recall that firms are subject to relatively lax trading-disclosure rules. In particular, the corporation—unlike its insiders—need not disclose the details of individual trades and can wait months before disclosing aggregate trading data.¹¹⁶ This opacity makes it easier for the corporation to generate profits for insiders by trading illegally on material inside information and

¹¹⁵ Note that Scenario 2 has similar distributional effects to a scenario in which Insider first generates \$10 in direct insider-trading profits and then donates the \$10 to ABC, capturing \$2 for himself and sharing \$8 with certain public shareholders.

¹¹⁶ See *supra* subsections II.B.3 & III.B.3.

legally on valuable but sub-material inside information. While indirect insider trading is more complicated for insiders, it can also be more rewarding.

In addition, U.S. insiders are likely to channel at least some of their insider trading activity through the corporation for two other important reasons. First, the reputational consequences for an insider of *corporate* liability for violating the securities laws pale in comparison with the reputational consequences of *personal* liability. From an insider's perspective, it is one thing for the corporation to be charged with a violation of the securities laws; it is quite another for the insider himself to be a defendant in an insider trading case.

Second, insiders are subject to Section 16(b) of the 1934 Act, which prohibits executives, officers, and persons owning more than 10% of a firm's shares from making what are commonly referred to as "short-swing profits."¹¹⁷ An insider makes a short-swing profit if she buys and sells stock within a six-month period and the purchase price is lower than the sale price.¹¹⁸ However, Section 16(b) does not apply to indirect purchases made by insiders through share repurchases or indirect sales made by insiders through equity issuances. Thus, a trade that would trigger Section 16(b) liability if done directly may be done indirectly without triggering such liability. In short, from an insider's perspective, the corporation will often be an attractive vehicle for insider trading.

B. *Destruction of Value*

Indirect insider trading, like direct insider trading, can also lead those controlling the corporation to engage in two types of activities that destroy economic value: costly stock-price manipulation and capital misdeployment.

1. Costly Stock-Price Manipulation

When insiders cause a firm to buy shares at a low price or sell shares at a high price, they have an incentive to manipulate the stock price to increase the value flowing to themselves, even if some economic value must be destroyed in the process. I call value-destroying stock price manipulation "costly stock-price manipulation."

Costly stock-price manipulation hurts public shareholders as a group in two ways. First, it increases the amount of value flowing from public

¹¹⁷ 15 U.S.C. § 78p(b) (2012).

¹¹⁸ *Id.*

investors to insiders. Second, it destroys value that might have otherwise been captured (at least in part) by public shareholders.

There is considerable evidence that insiders manipulate prices before and during repurchases, actively driving down earnings and the stock price to increase the value transferred to themselves and other nonselling shareholders.¹¹⁹ Such earnings manipulation is more aggressive when the CEO's equity ownership is higher, providing additional evidence that insiders conduct repurchases to buy stock indirectly at a cheap price.¹²⁰

Similarly, insiders manipulate stock prices upward around the time of equity offerings to increase the amount transferred from investors buying stock to nonbuying shareholders.¹²¹ Insiders often achieve this manipulation through real-earnings management, deliberately sacrificing some of the firm's long-term cash flow to report higher earnings.¹²²

2. Capital Misdeployment

Insiders engaging in indirect insider trading may also have an incentive to destroy value by misdeploying a firm's capital. Below, I highlight how bargain repurchases can destroy value by diverting cash from value-increasing projects.¹²³

To understand the potentially value-destroying effect of a bargain repurchase, consider again ABC Corporation. As before, ABC currently has six shares outstanding and is liquidated on a future Liquidation Date. Public shareholders hold five shares; Insider holds one share. Assume that ABC does not issue any dividends or sell any equity before Liquidation Date.

There are two scenarios:

¹¹⁹ See Guojin Gong et al., *Earnings Management and Firm Performance Following Open-Market Repurchases*, 63 J. FIN. 947, 962 (2008) (finding that even managers take steps to reduce reported earnings prior to open-market repurchases).

¹²⁰ *Id.* at 968-70 & tbl.4 (reporting association between pre-repurchase negative abnormal accruals and CEO stock ownership).

¹²¹ See, e.g., Siew Hong Teoh et al., *Earnings Management and the Underperformance of Seasoned Equity Offerings*, 50 J. FIN. ECON. 63, 64-65, 82 (1998) (reporting that seasoned equity issuers alter discretionary accruals in order to raise reported earnings, and that this manipulation may partially explain poor post-offering returns).

¹²² See Daniel A. Cohen & Paul Zarowin, *Accrual-Based and Real Earnings Management Activities Around Seasoned Equity Offerings*, 50 J. ACCT. & ECON. 2, 5, 11 tbl.4 (2010) (finding use of both accrual and real earnings management in a sample of 1511 SEOs between 1987 and 2006).

¹²³ The use of repurchases for indirect insider trading can also destroy economic value in other ways. In particular, it can: (1) lead to excessive cash holding in anticipation of future bargain-repurchase opportunities; and (2) cause a firm to use repurchases when dividends would be a more efficient distribution mechanism. See Fried, *Informed Trading*, *supra* note 45, at 1364-70.

No-Buyback Scenario: As before, if ABC does not repurchase any of its equity prior to Liquidation Date, it will distribute \$60 to the holders of its six shares at Liquidation Date. The no-transaction value of each of ABC's six shares at Liquidation Date is thus \$10.

Buyback Scenario: Now suppose that ABC conducts a repurchase before Liquidation Date when the stock trades at \$5 (\$5 less than its actual value of \$10), buying back a single share at that price.

Now assume that had the \$5 not been spent on the repurchase, it instead would have been invested in a project that yielded a 50% return. Under this assumption, the repurchase reduces ABC's Liquidation-Date value not by \$5, but by \$7.50, to \$52.50; the \$5 would have been invested in a project that yielded a 50% return. As a result, \$2.50 of economic value is lost.¹²⁴

Insider will not sell because he is aware the stock is underpriced; the share is thus purchased from a public shareholder. At Liquidation Date, the value of each of ABC's five remaining shares, including Insider's share, is thus \$10.50 (\$52.50/5).

By assumption, the repurchase destroys \$2.50 of economic value. In the No-Buyback Scenario, \$60 flows to all the shareholders at Liquidation Date. In the Buyback Scenario, \$5 flows to shareholders during the repurchase, and \$52.50 flows to shareholders at Liquidation Date, for a total of \$57.50.

But the bargain repurchase enriches Insider by shifting value from public shareholders to Insider. In the No-Buyback Scenario, Insider gets \$10 and public shareholders get \$50. In the Buyback Scenario, Insider gets \$10.50 and public shareholders get \$47 (\$42 + \$5). Thus, Insider reaps an extra \$0.50 even though the repurchase destroys economic value. The results are summarized in Table 4 below.

Table 4: Value-Destroying Bargain Repurchase

	Total Value	All Public	Nonselling Public	Selling Public	Insider
No Buyback	\$60.00	\$50.00	\$50.00 (5 x \$10.00)	n/a	\$10.00
Buyback	\$57.50	\$47.00	\$42.00 (4 x \$10.50)	\$5.00 (1 x \$5.00)	\$10.50

¹²⁴ For a model of rational underinvestment in firm projects to buy stock at a cheap price, see Onur Bayar et al., *Payout Policy Under Heterogeneous Beliefs: A Theory of Dividends Versus Stock Repurchases, Price Impact, and Long-Run Stock Returns* 23 (Oct. 2013) (unpublished manuscript), available at <http://ssrn.com/abstract=2287322> (explaining why the existence of heterogeneous beliefs about the value of a firm's project may cause managers to underinvest in the project in order to buy back shares at a low price).

To be sure, if capital markets functioned perfectly, ABC could borrow \$5 so that it could both buy back one share for \$5 *and* pursue the profitable project. But various market imperfections may make it difficult for ABC to both engage in the bargain repurchase and pursue all of its desirable projects.¹²⁵

Intriguingly, empirical studies suggest that firms that increase repurchases cut back on potentially desirable investment. A recent study found that repurchases, especially those that appear to be driven by insider stock ownership, have a significantly negative effect on a firm's investments in research and development.¹²⁶ The study found that, holding everything else equal, doubling share repurchases led to an 8% reduction in research and development expenditures.¹²⁷ An earlier study reached similar conclusions.¹²⁸ While these studies, by themselves, do not demonstrate that insiders destroy value to engage in bargain repurchase, they do suggest that repurchases may well divert cash from potentially productive activities inside the firm.¹²⁹

Finally, it is worth noting that this particular type of distortion—capital misdeployment—can arise from indirect insider trading, but not direct insider trading. While insiders can engage in direct insider trading without altering the firm's capital structure, indirect insider trading via bargain repurchases requires moving cash out of the corporation, with potential adverse consequences for the firm's value-creating activities.

¹²⁵ Market imperfections that could prevent a firm from simultaneously exploiting desirable investment opportunities and buying back cheap stock include: (1) information asymmetry between financiers and the firm; and (2) debt-covenant renegotiation costs. For a discussion of these imperfections, see Jesse M. Fried, *Share Repurchases, Equity Issuances, and the Optimal Design of Executive Pay*, 89 TEX. L. REV. 1113, 1125-26 (2011) [hereinafter Fried, *Share Repurchases*].

¹²⁶ See Alok Bhargava, *Executive Compensation, Share Repurchases and Investment Expenditures: Econometric Evidence from US Firms*, 40 REV. QUANTITATIVE FIN. & ACCT. 403, 419-20 & tbl.6 (2013) (reporting that share repurchases negatively affected research and development expenditures, presumably because fewer funds were available for these expenditures).

¹²⁷ *Id.* at 419.

¹²⁸ See Daniel A. Bens et al., *Real Investment Implications of Employee Stock Option Exercises*, 40 J. ACCT. RES. 359, 383 (2002) (finding evidence consistent with firms exhibiting poor performance due to the diversion of cash from productive investments to fund share repurchases).

¹²⁹ It is worth noting that insiders' use of a dividend to distribute cash would not give rise to the same type of capital-misallocation problem. Because the dividend is pro rata, it would ensure that insiders and public shareholders are in the same position. Thus, a dividend that reduced public shareholders' wealth would also reduce insiders' wealth.

V. TOWARD REDUCING INDIRECT INSIDER TRADING

Parts III and IV discuss how firms trading in their own shares are subject to trade-disclosure rules that are much less stringent than those applied to their own insiders, and that insiders can exploit these relatively lax rules to engage in indirect insider trading. Such indirect insider trading imposes costs on public shareholders by systematically transferring value to insiders and by causing insiders to sacrifice economic value to boost their insider-trading profits.

This Part puts forward a proposal to reduce these costs. Under this proposal, a firm, like its insiders, would be required to disclose precise details of trades in its own stock within two days. Section A describes the proposed two-day rule. Section B explains how such a two-day rule would reduce the costs associated with indirect insider trading and increase public shareholders' returns.

A. *The Proposed Two-Day Rule*

Section 16(a) of the 1934 Act currently requires insiders to provide detailed information about any trade in their firm's shares within two business days.¹³⁰ Firms trading in their own shares, by contrast, may wait months until they disclose the existence of trading activity in their own shares and can get away with providing only aggregate data.¹³¹ These lax trade-reporting rules make it easier for insiders to trade indirectly on inside information, imposing potentially large costs on public shareholders.

These costs would be reduced if a firm were subject to the same trade-disclosure requirements as its insiders. In particular, a corporation should be required to disclose each trade in its own shares within two business days of the transaction. This two-day rule would improve transparency and provide public investors with a timely, accurate, and comprehensive picture of insiders' trading, both direct and indirect.

Importantly, this two-day rule should also cover *indirect* trading by a firm in its own shares. That is, the rule should apply to trades in a firm's shares made by the firm's direct or indirect subsidiaries. Otherwise, a firm could evade the two-day rule by trading indirectly through its subsidiaries, much as insiders currently avoid Section 16(a)'s two-day disclosure requirement by trading indirectly through their firms.¹³²

¹³⁰ See *supra* subsection I.B.2.

¹³¹ See *supra* subsections II.B.3 & III.B.3.

¹³² For similar reasons, the proposed two-day rule should cover transactions in options or other derivatives that are economically similar to purchases or sales of the firm's stock.

The proposed two-day rule would not unduly burden firms, just as Section 16(a) has not unduly burdened insiders. Indeed, the largest stock markets outside the United States already require even more timely disclosure by firms of trades in their own shares. For example, in the United Kingdom and Hong Kong, publicly traded firms must report all share repurchases to the stock exchange before trading begins the next business day.¹³³ Japan requires same-day disclosure.¹³⁴ In Switzerland, a firm trading in its own shares commonly does so through a separate trading line, and the transaction is instantaneously disclosed to all market participants.¹³⁵ If firms in Hong Kong, Japan, and the United Kingdom can disclose open-market transactions by the end of the trading day or by the next morning, U.S. firms should be able to disclose their trades within two days without too much difficulty.

B. *Benefits of the Two-Day Rule*

The two-day rule would boost public shareholder returns by reducing both the diversion of value to insiders and the destruction of economic value that arises as a byproduct of indirect insider trading.

1. *Reduced Diversion of Value to Insiders*

The two-day rule would reduce the value diverted to insiders by illegal and legal indirect insider trading.

a. *Reduced Illegal Insider-Trading Profits*

As Parts II and III explain, a firm is not permitted to trade in its own shares on the open market when it possesses material inside information.¹³⁶ But enforcing this prohibition is far from easy. It is especially difficult when, as now, firms need not disclose the details of individual transactions

¹³³ See Financial Services Authority Handbook: Listing Rules R. 12.4.6 (Apr. 2013) (U.K.), available at <http://fsahandbook.info/FSA/html/handbook/LR/12/4> (requiring that repurchase trades be reported no later than 7:30 AM on the business day following the purchase); Paul Brockman & Dennis Y. Chung, *Managerial Timing and Corporate Liquidity: Evidence from Actual Share Repurchases*, 61 J. FIN. ECON. 417, 421 (2001) (describing Hong Kong trade-reporting rules for repurchasing firms); Hua Zhang, *Share Price Performance Following Actual Share Repurchases*, 29 J. BANKING & FIN. 1887, 1890 (2005) (same).

¹³⁴ Jaemin Kim et al., *Open Market Repurchase Regulations: Cross-Country Examination*, CORP. FIN. REV., Jan.-Feb. 2005, at 29, 31-32.

¹³⁵ Dennis Y. Chung et al., *Repurchasing Shares on a Second Trading Line*, 11 REV. FIN. 253, 254-55 (2007).

¹³⁶ See *supra* subsections II.B.2 & III.B.2.

in their own shares. Absent such information, one could not even figure out what trades should be investigated.

The two-day rule would require firms trading in their own shares to provide the details of each day's trades. Specific information about daily trades would make it easier for regulators to investigate potentially illegal trades by the corporation and, where appropriate, sanction the firm or those responsible for the trading. Better enforcement can be expected to increase deterrence, thereby reducing the amount of value diverted by insiders through illegal insider trading by the firm.

Of course, one might believe that firms currently do not trade in their own shares when in possession of material inside information. However, this belief cannot be tested without specific information about firms' trades in their own shares. In some jurisdictions, including Hong Kong and the United Kingdom, such information has long been available to regulators and shareholders. In the United States, unfortunately, it is not. Firms' trades in their own shares are largely hidden from public view.

b. *Reduced Legal Insider-Trading Profits*

The two-day rule would also reduce the amount of value diverted to insiders via legal insider trading by their firms. As I explain in more detail below, it would do so in two ways. First, the two-day rule would reduce the value diverted to insiders for any given volume of information-driven firm trading. Second, the two-day rule would reduce the volume of information-driven firm trading.

i. *Reduced Profits Per Trade*

Suppose that insiders engage in indirect insider trading by having their firm buy or sell \$X of its own shares on inside information over a week-long period. Under the proposed rule, the firm must begin disclosing the transactions within two days of the first trade. If market participants believe that the firm is attempting to buy or sell stock at a favorable price, they will adjust their valuations of the stock.¹³⁷ This adjustment will cause the stock price to move against the firm. As a result, the firm will execute its trades

¹³⁷ For a discussion of how market participants currently analyze and respond to Section 16(a) trade disclosures by insiders, see Fried, *Reducing the Profitability*, *supra* note 10, at 324. Market participants could be expected to apply the same methodology to decoding trades by a firm in its own shares.

after the second day on less favorable terms. Insiders will therefore capture less value through a firm's legal insider trading than they do currently.¹³⁸

To be sure, market participants will not know the exact motives for a particular repurchase or equity issuance. As a result, the price adjustment following trade disclosures by the firm will never precisely reflect the inside information that may be behind the transactions. Instead, the adjustment can capture at most the expected value of the inside information communicated by the disclosures. Over time, however, these price adjustments can be expected to reduce substantially insiders' profits from indirect insider trading—even if the volume of indirect insider trading is unaffected by the two-day rule.¹³⁹

ii. Reduced Trade Volume

The two-day rule would also reduce insiders' indirect insider-trading profits by reducing the frequency of bargain repurchases and inflated-price ATMs. As explained above, the stock price will adjust to trade disclosures as the trades are occurring, thereby reducing indirect insider-trading profits. Thus, the expected benefit to insiders of conducting bargain repurchases and inflated-price equity issuances will decline under a two-day rule. As a result, they are likely to engage in fewer such transactions. Thus, the two-day rule is likely to reduce not only the profits associated with any given information-driven trade, but also the volume of such trades.

2. Less Value Destruction

As Part IV explains, the use of the firm for indirect insider trading can lead insiders to destroy economic value by manipulating the stock price or distributing cash that would generate greater social returns inside the

¹³⁸ Most of the insider-trading profits currently generated by OMRs appear to come from firms choosing the right months to buy back shares, not the right days within any given month. See De Cesari et al., *supra* note 76, at 1034 (finding that the majority of trading gains from OMRs come from “between-month’ timing, i.e., concentrating repurchases in months during which prevailing market prices are relatively low”). If a two-day disclosure rule were adopted, the market reaction to repurchase announcements would make it more difficult for the firm to continue buying stock at a very low price during the remainder of the month, substantially reducing OMR insider-trading profits.

¹³⁹ Instructively, the change in the disclosure deadline for Section 16(a) (from the tenth day of the following month to two business days following the trade) was accompanied by a decline in insiders' per-trade profits. See Email from Christopher Malloy, *supra* note 42 (describing unreported results from a study of direct insider trading, which indicated that insiders' ability to generate insider-trading profits declined after the change in Section 16(a)'s disclosure deadline). This finding suggests, as one would expect, that transparency reduces an insider's ability to profit from his or her access to inside information.

firm.¹⁴⁰ By reducing insiders' expected indirect profits from bargain repurchases and inflated-price equity issuances, the two-day rule would also reduce the likelihood that insiders engage in either type of value-destroying activity. The resulting increase in value would accrue in part to public shareholders, further increasing their returns.

3. A Step in the Right Direction

In this Article, I propose a two-day disclosure rule for firms trading in their own stock. But we have seen that other jurisdictions, such as the United Kingdom, require even more timely disclosure by firms of trades in their own shares.¹⁴¹ One might therefore wonder whether a two-day rule is optimal. Would even earlier disclosure be better? The answer is yes.

The two-day rule would still enable insiders to engage in some indirect insider trading, just as Section 16(a) permits insiders to engage in some direct insider trading.¹⁴² First, firms can trade secretly for two days before announcing their trades. During those two days, there will not be any adjustment in the stock price arising from public disclosure of the trading. Second, to the extent the market does not immediately adjust to the information communicated by a trade disclosure, but rather does so only over time, a firm can continue to trade profitably on inside information even after the market begins adjusting to the information provided by its trade disclosures.

Because of the limitations of a two-day rule, a one-day or same-day rule for both firms *and* insiders would be even better. Insiders would have less time to trade secretly—directly or indirectly. And stock prices would have more time to impound the information signaled by trade disclosures, reducing insider-trading profits on subsequent trades.

Indeed, I have proposed elsewhere that both insiders and firms be required to disclose their planned trades in advance.¹⁴³ Such a pre-trading disclosure rule, I have shown, would substantially reduce the costs associated with direct and indirect insider trading.¹⁴⁴ Thus, I do not claim that the

¹⁴⁰ See *supra* Section IV.B.

¹⁴¹ See *supra* Section V.A.

¹⁴² See Email from Christopher Malloy, *supra* note 42 (describing unreported results from a study of direct insider trading which indicated that insiders' ability to generate insider-trading profits declined but did not disappear after the change in Section 16(a)'s disclosure deadline).

¹⁴³ See Fried, *Informed Trading*, *supra* note 45, at 1375-76 (proposing a pre-trade disclosure rule for firms conducting OMRs); Fried, *Reducing the Profitability*, *supra* note 10, at 349-53 (proposing a pre-trade disclosure rule for corporate insiders).

¹⁴⁴ See Fried, *Informed Trading*, *supra* note 45, at 1376-82 (explaining how a pre-repurchase disclosure rule would reduce managers' profits from bargain repurchases); Fried, *Reducing the*

two-day rule proposed here is ideal. Rather, I see the adoption of such a rule as an easy (but important) step in the right direction—a measure that would harmonize insider-trading rules, improve transparency in the capital markets, and substantially reduce indirect insider trading and its costs.¹⁴⁵

CONCLUSION

Publicly held U.S. firms trading their own shares are subject to trade-disclosure rules that are much less stringent than those imposed on their own insiders trading these same shares. Insiders must report the specific details of each trade within two business days. Firms, by contrast, need to report only aggregate monthly or quarterly trading activity, and can wait for months after this activity to do so.

Not surprisingly, insiders exploit these relatively lax rules to engage in indirect insider trading. There is overwhelming evidence that insiders use private information to have firms secretly buy and sell their own shares at favorable prices. Given that the volume of repurchases and equity issuances is hundreds of billions of dollars annually, the volume of such indirect insider trading is likely to be substantial.

Such indirect insider trading can impose substantial costs on public investors. It systematically diverts value from public investors to insiders, who, in the average U.S. firm, own more than 20% of the firm's equity.¹⁴⁶ Indirect insider trading can also lead insiders to misallocate the firm's capital and engage in value-destroying stock-price manipulation.

To reduce these costs, I have put forward a simple proposal: subject firms to the same two-day trade-disclosure rules as their insiders. Other jurisdictions with developed stock markets, such as Hong Kong and the United Kingdom, already impose one-day trade-disclosure rules for firms. There is no reason to deny public investors in the U.S. market the benefits that would flow from a similar degree of transparency.

Profitability, *supra* note 10, at 353-64 (explaining how a pre-trading disclosure rule would reduce insiders' ability to make direct insider-trading profits).

¹⁴⁵ In other work, I show that one could completely eliminate insiders' ability to profit from direct and indirect insider trading through appropriately structured compensation arrangements. See Jesse M. Fried, *Hands-Off Options*, 61 VAND. L. REV. 453, 468-74 (2008) (describing an equity arrangement that would eliminate insiders' ability to make direct insider-trading profits by taking control of the timing of sales out of their hands); Fried, *Share Repurchases*, *supra* note 125, at 1136-40 (describing an equity arrangement that would eliminate insiders' ability to make indirect insider-trading profits by adjusting their equity position whenever the firm buys or sells its own shares).

¹⁴⁶ See *supra* notes 70-72 and accompanying text.