

FRAUD ON THE MARKET AFTER *AMGEN*

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There are multiple ways investors decide to purchase or sell a security. The classic perspective envisions the investor studiously poring through complex financial information with the particular information relied upon coming from a variety of sources.¹ Such classical investing, of course, does not require that the investors do their own evaluation; they frequently rely on intermediaries such as brokers, investment advisors, and even financial columnists. Such information mediation is efficient for the classic investor and creates the demand side of the burgeoning market for the financial intermediaries. Good investment advice leads to the same favorable effect as the better mousetrap: The world beats a path to that advisor's door. By whatever method the classic investor uses to be informed, what motivates the classic investor is the belief that there are opportunities for a reasonable return by the astute deciphering of publicly available information.

A variation of the classic investor model is the professional trader that has armed itself with a proprietary algorithm for detecting “buy” and “sell” opportunities.² The inputs to such a model vary greatly and may not even include the security's *price*, but likely focus on a range of other performance data the investor believes predictive of performance by the security. To be sure, the professional trader relies on publicly available information but not always the same

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1. See, e.g., BENJAMIN GRAHAM & DAVID L. DODD, *SECURITY ANALYSIS passim* (5th ed. 1951) (describing processes to analyze financial statements and determine intrinsic value of shares as prelude to identifying whether a security offers the prospect of a positive return).

2. The professional trader may be guided by a proprietary algorithm keyed to financial information regarding the firm or various market developments. See Tom C.W. Lin, *The New Investor*, 60 UCLA L. REV. 678, 689–93 (2013) (describing the rising role of such traders in capital markets).

information as the classic investor. Thus, a kernel of information that may well be dispositive to the classic investors may not be to the professional trader and vice versa.³

At the other extreme from either the classical investor or professional trader is the proverbial dart thrower whose decision to purchase or sell is guided not by analysis, but by the fortuity of the dart's path.⁴ Just why throw darts is an interesting question. Some may counsel throwing darts as the natural response/unqualified obeisance to the teachings of the efficient market hypothesis: Security prices reflect all publicly available information so that it is not possible to earn an above average return on the basis of public information. Better to read a book than analyze dense financial information; knowledge improves the mind, but pursuit of underpriced or overpriced securities is not productive.⁵

In addition, an ever-growing investment strategy is indexing.⁶ Indexers seek to mimic the performance of a particular index, such as the Standard & Poor's Industrial 500. Indexers and dart throwers may share a common position: It is not possible to beat the market. Whereas the indexer is more systematic in how it responds to this believed-reality of the market, the dart thrower is neutral on what the proper weight should be for any single stock in her portfolio and simply casts her fate to the winds. Indexers may have other reasons not to invest classically. Some financial institutions are so large that it would be extraordinarily burdensome, practically and financially, to

3. See, e.g., *GAMCO Investors, Inc. v. Vivendi, S.A.*, 927 F. Supp. 2d 88, 101–02 (S.D.N.Y. 2013) (holding that even though the misrepresentation impacted the price of Vivendi shares, the facts that were misrepresented did not assume importance in the professional trader's investment model).

4. See Georgette Jasen, *Investment Dartboard: A Brief History of Our Contest*, WALL ST. J., Oct. 7, 1998, at C1 (recounting the extensive history—100 six-month contests—of pitting dart throwers against selected analysts, where the dart throwers' average gain of 4.5 percent fell short of the 6.8 percent average gain of the Dow Industrials and the 10.9 percent average return garnered by analysts).

5. For example, Brad M. Barber and Douglas Loeffler suggest that the greater return by the analysts was due to their selecting riskier securities—adjusted for risk they earned only 4.06 percent greater than the dart throwers—and likely “piling on” by investors who learned of the analysts' recommendations before the six-month measurement period ended. Brad M. Barber & Douglas Loeffler, *The “Dartboard” Column: Second-Hand Information and Price Pressure*, 28 J. FIN. & QUANTITATIVE ANALYSIS 273, 274 (1993).

6. For example, more than one-third of total mutual fund assets and exchange-traded funds are passively managed. *A Steady Climb for Indexing*, WALL ST. J., Apr. 8, 2013, at R1. These passively managed products have grown at an average annual rate of 26 percent over the past seventeen years, twice that of actively managed mutual funds over the same period. Rodney N. Sullivan & James X. Xiong, *How Index Trading Increases Market Vulnerability*, 68 FIN. ANALYSTS J. 70, 72–73 (2012).

actively manage all or a substantial portion of their portfolio. The costs of active management for all funds would reduce the returns for their beneficiaries. Hence, limiting discretionary investing reduces overall management costs and enables limited-time investment decisions to be more focused.⁷ The pursuit of an indexing strategy, therefore, can be driven by a quest for administrative efficiency and not solely by the tenets of the efficient market hypothesis. Indexing is also informed by portfolio theory. With portfolio theory, we find that the power of an academic theory has cabined resources into clusters where aggregate risk is the focus so that the concern is the individual security's impact on overall portfolio risk.⁸

A final type of investing is style investing.⁹ The style investor certainly would include indexing but is much broader and variable. The pursued style can be the result of a perceived economic trend—for example, a broadly-based preference of Internet-based companies over pharmaceuticals—which can change after a few weeks or months, so that later the perceived trend is, for example, extractive industries over Internet-based companies.¹⁰ Style investing is in a sense passive investing, but not in the same way as indexing. Style investing entails some cognitive effort to identify the trends. There is growing evidence of a “piling on” feature among many institutions, i.e., style investing, where we observe that institutions alter their investment portfolio so as to mimic the profitable pursuits of earlier first-embracers of an economic sector that produced abnormal

7. See, e.g., Jason Kephart, *Passive Investing: If Its Good Enough for CalPERS...*, INVESTMENT NEWS (Mar. 24, 2013, 4:29 PM), <http://www.investmentnews.com/article/20130324/FREE/130329970#> (discussing pension fund giant, CalPERS, which has passively invested more than one-half of its \$255 billion portfolio). See also *Passive Equity Portfolios of 10 Large Pension Funds*, PENSIONS & INVESTMENTS (Mar. 25, 2013), <http://www.pionline.com/gallery/20130325/SLIDESHOW2/325009999> (noting that passive investment for the top five pension funds' equity portfolios was 74 to 93 percent).

8. This in turn can induce further passivity in oversight on the part of such institutional holders. See generally Ronald J. Gilson & Jeffrey N. Gordon, *The Agency Costs of Agency Capitalism: Activist Investors and the Revaluation of Governance Rights*, 113 COLUM. L. REV. 863 (2013) (noting that portfolio theory has contributed to passive investment practices by institutional holders and thereby weakened the value of governance/monitoring rights, such as voting, for which activist investors provide something of an efficient antidote).

9. See Nicholas Barberis & Andrei Shleifer, *Style Investing*, 68 J. FIN. ECON. 161, 164–66 (2003) (noting that it is not the prospective cash flows associated with the individual firm, but rather the risk-return profile, and other like measures, of a group of firms).

10. For evidence of style investing, see Nicole Choi & Richard W. Sias, *Institutional Industry Herding*, 94 J. FIN. ECON. 469, 480–82 (2009) (documenting evidence of style investing); Kenneth Froot & Melvyn Teo, *Style Investing and Institutional Industry Herding*, 43 J. FIN. & QUANTITATIVE ANALYSIS 883, 904–05 (2008) (concluding that evidence of style investing tactics was present in investor decisions).

returns for the earlier investors.

In sum, there are a wide range of investment approaches in today's markets. Complementing the above description is that many of the investors, not so with the dart thrower and less so for the style investor, practice, to some extent, portfolio investing; with portfolio investing, the merits of a particular stock are assessed, not by isolating that stock's perceived risk-return, but by assessing how the stock's acquisition or disposition will impact the overall risk-return of the investor's portfolio. For this calculation, the co-movement of the individual security to the market, rather than its particular financial performance and position, weighs heavily in the investor's decision making. Although the individual firm's return over time is no doubt impacted by the firm's periodic release of financial information regarding its performance, the portfolio investor's engagement with that information is attenuated, as the focus of portfolio investment is the co-variance of an individual security's performance over time.

Now assume that the classic investor, the professional trader, the dart thrower, the indexer, and the style investor each purchased the same security, only to learn that its price had been inflated by accounting chicanery carried out by nefarious corporate officers. The above-described constellation of investment approaches challenges the contemporary heuristic—reliance—for handling causation when fraudulent information reaches public securities markets and investors collectively seek relief through a class action. To be sure, the classic investor can be thought to rely on the fraudulent information, albeit more likely indirectly. Whether the professional trader relied will depend on whether the model used incorporated the particular data, for example a security's price, that was misrepresented or affected by the misrepresentation. There appears to be no basis to conclude that the dart thrower, indexer, or style investor relied on any information whatsoever. But does the absence of classical reliance mean there is also the absence of a claim, or at least one that can be prosecuted collectively as a class action? *Amgen Inc. v. Connecticut Retirement Plans and Trust Funds*¹¹ brings the Supreme Court closer to resolving this question. As will be seen, *Amgen* houses the dog that did not bark. Its most significant contribution is not the issue it did resolve; instead, *Amgen* is the harbinger for the resolution of the most significant development for future securities class action litigation—

11. 133 S. Ct. 1184 (2013).

the viability of the fraud on the market approach to causation.

I. RELIANCE TO FRAUD ON THE MARKET

Most securities fraud actions occur under the antifraud provision, Section 10(b) and Rule 10b-5 of the Securities Exchange Act of 1934 (Exchange Act). Requiring reliance on the misrepresentation was solidified in the antifraud jurisprudence in *List v. Fashion Park, Inc.*,¹² where the Second Circuit reasoned that reliance was necessary “to certify that the conduct of the defendant actually caused the plaintiff’s injury.”¹³ The court observed that if it did not require reliance it would be eliminating “the principle of causation in fact.”¹⁴ After reviewing the extensive trial record, the Second Circuit held that the district court properly concluded that the plaintiffs would have sold their shares regardless of whether they had known of the omitted facts.¹⁵ Subsequent Supreme Court cases have also demanded that causation, frequently referred to as transaction causation, be established between the misrepresentation and the investor’s decision,¹⁶ so that

12. 340 F.2d 457 (2d Cir. 1965). There are of course much earlier references to reliance in private litigation under the antifraud provision. See *Speed v. Transamerica Corp.*, 99 F. Supp. 808, 833 (D. Del. 1951) (allowing suit to proceed because all members of the class relied on the defendant’s misrepresentations).

13. *List*, 340 F.2d at 462. In taking this position, the court liberally invoked the Restatement of Torts as well as the leading treatises by Prosser and Harper. *Id.*

14. *Id.* at 463.

15. *Id.* at 464.

16. In *Affiliated Ute Citizens v. United States*, 406 U.S. 128, 153 (1972), the Court broadly stated that “[u]nder the circumstances of this case, involving primarily a failure to disclose, positive proof of reliance is not a prerequisite to recovery. All that is necessary is that the facts withheld be material.” Taken literally, as many lower courts have, this makes positive proof of reliance depend on whether the misrepresentation is a misstatement or omission. This ascribes too little weight to the defendants’ egregious misconduct and sympathetic position of the plaintiffs in *Affiliated Ute*. While representing very unsophisticated and obviously dependent clients wishing to sell their privately held shares, the defendants failed to disclose that the defendants not only had standing orders at prices several times what the defendants purchased the shares from the plaintiffs, but also that the defendants thereby were garnering enormous profits through their representation of the plaintiffs. *Id.* at 151–54, 161. Reliance could, therefore, be easily presumed under these facts. *Id.* at 153–54. The Supreme Court has also been pragmatic when dealing with transaction causation in the context of aggregate decision making. *Mills v. Elec. Auto-Lite Co.* is such a case. 396 U.S. 375 (1970). *Mills* involved a material omission in a proxy statement seeking the approval of the shareholders of a public corporation. *Id.* at 384. As a result of *Mills*, transaction causation does not require proof of how each shareholder would have voted had the omission not occurred; rather, transaction causation is established by evidence demonstrating that the defendant lacked sufficient votes to approve the transaction under state law. *Id.* at 384–85. Thus, in *Virginia Bankshares, Inc. v. Sandberg*, 501 U.S. 1083, 1107–08 (1991), causation was lacking because the defendant controlled sufficient shares to assure approval of the transaction. However, if the omission prevents the individual shareholder from exercising his appraisal remedy, causation is not impacted by the defendant’s

transaction causation in some form is above peradventure in private antifraud suits. But does such causation require proof the investors relied?

For most investors who purchase publicly traded shares, initiating an individual suit is not an option; the recoverable amount is too slight to justify the suit's costs.¹⁷ Thus, although the class action is not the last resort, it is the only viable option for most aggrieved investors. Yet, a single issue stands in the path of investors seeking to join their claims: whether proof of individual reliance is required for recovery. Because the burden of inquiring whether hundreds, or likely thousands, of investors relied on the alleged misrepresentation would be overwhelming, the suit could not be certified as a class if the courts required each class member to establish his or her reliance on the alleged misrepresentation.

Claims of fraud by numerous investors naturally invite the question whether the alleged fraud was causally related to the harm investors alleged. As seen, the courts have historically examined this connection through the lens of reliance or, somewhat more generally, transaction causation. How courts address causation, therefore, necessarily implicates whether aggregation of claims is permissible. Prior to the Supreme Court's initial engagement of this question for fraudulent releases of information in connection with publicly traded companies, the lower courts pursued one of three distinct approaches: Some courts held that reliance is satisfied due to the proximate causation between the misstatement and harm; other courts held that reliance requirements should be relaxed because to hold otherwise would impose an overly burdensome evidentiary requirement; and, most commonly, courts simply combined the two rationales.

*Panzirer v. Wolf*¹⁸ illustrates the first approach to justifying fraud on the market. For simplicity, this approach will be referred to as the price distortion justification. Zelda Panzirer, a substitute school teacher, while traveling to Vermont with her husband, was attracted to a story in the Wall Street Journal's "Heard on the Street" column that

unquestionable voting power to assure the transaction, because individual, not aggregate, decision-making renders causation an inquiry into how the omission or misstatement impacted the plaintiff's resort to appraisal. *Wilson v. Great Am. Ind., Inc.*, 979 F.2d 924, 931 (2d Cir. 1992).

17. See Robert H. Klonoff, *The Decline of Class Actions*, 90 WASH. U. L. REV. 729, 815 (2013) (noting that numerous court decisions have found that where investors cannot rely on the class action device to bring fraud suits, the alternative is not bringing a claim at all).

18. 663 F.2d 365 (2d Cir. 1981).

provided an optimistic report on companies that produced educational cassettes.¹⁹ Two paragraphs of the story were devoted to a favorable review of Allied Artists.²⁰ She asked her husband to stop the car so that she could call her broker.²¹ After reviewing the Standard & Poor's Tear Sheets for a few minutes, the broker reassured her that there appeared to be no negative news regarding Allied.²² Thereupon she purchased 200 Allied shares; later that day she acquired another 500 shares.²³ A few months later, Allied filed for bankruptcy, at which time it was discovered that the annual report relied on by Standard & Poor's inflated Allied's revenues and the auditor failed to qualify its opinion regarding Allied's ability to continue as a going concern.²⁴ In certifying the class, the Second Circuit described in great detail a *prima facie* acceptable causal chain:

[T]he plaintiff argues that if Allied's report had been accurate, the stock analysts interviewed by the Journal would not have mentioned the company favorably, the Journal would not have devoted two paragraphs to Allied's prospects in the video cassette market, and plaintiff would not have been led by the article to buy her stock. Defendants have introduced no evidence to contradict this chain of causation. Though, at trial, the validity of the chain of causation will be tested, on summary judgment questions about this chain of causation must be resolved in favor of plaintiff, who in the case of a material fraud on the market enjoys a presumption of reliance. Where the plaintiff acts upon information from those working in or reporting on the securities markets, and where that information is circulated after a material misrepresentation or omission, plaintiff has stated a sufficient claim of reliance on the misrepresentation or omission.²⁵

19. *Id.* at 367.

20. *Id.*

21. *Id.*

22. *Id.*

23. *Id.*

24. *Id.*

25. *Id.* Similar reasoning appears in *Peil v. Speiser*, 806 F.2d 1154, 1160–61 (3d Cir. 1986) (“Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements. The misstatements may affect the price of the stock, and thus defraud purchasers who rely on the price as an indication of the stock’s value.”). *See also* *Shapiro v. Midwest Rubber Reclaiming Co.*, 626 F.2d 63, 69 (8th Cir. 1980) (holding that misrepresentation causes harm to the investor “either directly (through actual reliance) or indirectly (by affecting the market upon which the party traded)” (citation omitted)).

In contrast to the price distortion approach, some early courts presumed reliance in part out of evidentiary concerns, fearing an inquiry into reliance would not likely be productive while proving an unmanageable burden for the litigants and the court. For example, as one district court found:

[W]hile some sort of reliance on the part of the plaintiff still must be proved, it appears that reliance of the actual, subjective, individual nature necessary in the classical fraud case would unnecessarily encumber large 10b-5 actions and thereby thwart the Congressional interest in providing a means by which investors may recover against market manipulators in federal court. In the stock exchange context (as opposed to closely held stock sold and purchased in a face-to-face transaction) the interest of Congress in seeing that the integrity of the market is preserved is even greater.²⁶

More frequently, both justifications were invoked by the lower courts, as illustrated by the “seminal and best known of the ‘fraud on the market’ cases”²⁷—*Blackie v. Barrack*²⁸:

Here, we eliminate the requirement that plaintiffs prove reliance directly in this context because the requirement imposes an unreasonable and irrelevant evidentiary burden. A purchaser on the stock exchanges may be either unaware of a specific false representation, or may not directly rely on it; he may purchase because of a favorable price trend, price earnings ratio, or some other factor. Nevertheless, he relies generally on the supposition that the market price is validly set and that no unsuspected manipulation has artificially inflated the price, and thus indirectly on the truth of the representations underlying the stock price whether he is aware of it or not, the price he pays reflects material misrepresentations. Requiring direct proof from each purchaser that he relied on a particular representation when purchasing would defeat recovery by those whose reliance was indirect, despite the fact that the causal chain is broken only if the purchaser would have purchased the stock even had he known of

26. *In re Memorex Sec. Cases*, 61 F.R.D. 88, 99 (N.D. Cal. 1973). *Cf.* *Chris-Craft Ind., Inc. v. Piper Aircraft Corp.*, 480 F.2d 341, 375 (2d Cir. 1973) (holding that a bidder whose tender offer was allegedly thwarted by another’s misrepresentations was excused of proving individual reliance on the misrepresentations by the target shareholders because such an undertaking would be so burdensome as to be impractical).

27. *Shores v. Sklar*, 647 F.2d 462, 478 (5th Cir. 1981).

28. 524 F.2d 891 (9th Cir. 1975).

the misrepresentation.²⁹

Fraud on the market ultimately reached the Supreme Court in *Basic Inc. v. Levinson*.³⁰ On three occasions over a thirteen-month period, Basic stated that it was not aware of any company development that would explain the increased trading in its stock, even though it was engaged in discussions and negotiations for its acquisition with Combustion.³¹ When Basic ultimately announced it would merge with Combustion Engineering, its stock soared. Disappointed investors who sold Basic shares in the interval between its first denial and the merger's announcement brought a class action alleging the misstatements were materially misleading. Their suit would ultimately establish the parameters within which the securities class action suit survives, if only barely at times.

With only six Justices participating, a majority³² held it was sufficient that class members alleged they had relied on their belief that the security's price reflected all publicly available information.³³ The Court's slim majority reasoned "that persons who had traded Basic shares had done so in reliance on the integrity of the *price* set by the market."³⁴ Note here the reliance to be presumed is not on any particular information that may have impacted a security's price, but rather that the price of the security is impacted by financially significant information. Thus, *Basic* did not adopt an approach that required evidence only that the defendant's misrepresentation impacted the stock's price and, thus, caused the class members to purchase or sell at a price distorted by the misrepresentation. By retaining reliance, *Basic* required more. As will be seen, it is on this point that the mischief and difficulty in applying *Basic* becomes problematic. The Court spoke broadly about how prices are formed in well-developed markets:

29. *Id.* at 907. *See also Shores*, 647 F.2d at 479 (Randall, J., dissenting) (criticizing the majority for "partial abandonment of the reliance requirement"); *Tucker v. Arthur Andersen & Co.*, 67 F.R.D. 468, 480–81 (S.D.N.Y. 1975) (discussing the market response to a corporation's misstatements and subsequent investor reliance on the market price).

30. 485 U.S. 224 (1988).

31. *Id.* at 227–28.

32. In *Amgen Inc. v. Conn. Ret. Plans & Trust Funds*, 133 S. Ct. 1184, 1192 n.1 (2013), Justice Ginsburg expressly observed in her opinion for the majority that pursuant to 28 U.S.C. § 1, a majority of a quorum of six Justices constitutes a majority opinion of the Court.

33. *Basic Inc.*, 485 U.S. at 245. The Court also held that the materiality of speculative information should be the product of the probability of the event's occurrence and the event's magnitude. *Id.* at 231–33.

34. *Id.* at 245 (emphasis added).

The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business. . . . Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements. . . . The causal connection between the defendants' fraud and the plaintiffs' purchase of stock in such a case is no less significant than in a case of direct reliance on misrepresentations.³⁵

Justice Blackmun further supported the plurality opinion by contrasting the different decision-making found in the personal face-to-face transaction and impersonal market transaction:

In face-to-face transactions, the inquiry into the investor's reliance upon information is into the subjective pricing of that information by the investor. With the presence of a market, the market is interposed between the seller and buyer and, ideally, transmits information to the investor in the processed form of a market price. Thus the market is performing a substantial part of the valuation process performed by the investor in a face-to-face transaction. The market is acting as the unpaid agent of the investor, informing him that given all the information available to it, the value of the stock is worth the market price.³⁶

Note that the *Basic* majority stopped short of saying evidence of such a connection satisfied causality, even for the purpose of certifying the class. Importantly, the *Basic* majority observed that the presumption of reliance in the first instance was supported, like presumptions generally, on "fairness, public policy, and probability, as well as judicial economy."³⁷ To this end, the *Basic* majority reasoned

35. *Id.* at 241–42 (quoting *Peil v. Speiser*, 806 F.2d 1154, 1160–61 (3d Cir. 1986)). The reasoning adopted in *Basic* was more fully developed earlier in a leading fraud on the market case, *Blackie*. In *Blackie*, the Ninth Circuit concluded that the investor "relies generally on the supposition that the market price is validly set and that no unsuspected manipulation has artificially inflated the price, and thus indirectly on the truth of the representation underlying the stock price whether he is aware of it or not, the price he pays reflects material misrepresentations." *Blackie v. Barrack*, 524 F.2d 891, 907 (9th Cir. 1975). The court further supported its position by concluding that the approach was consistent with the purpose of the antifraud statute: to "foster an expectation that securities markets are free from fraud an expectation on which purchasers should be able to rely." *Id.* See also *Peil*, 806 F.2d at 1161 ("In an open and developed market, the dissemination of material misrepresentations or withholding of material information typically affects the price of the stock, and purchasers generally rely on the price of the stock as a reflection of its value."). The *Basic* Court also believed that fraud on the market was consistent with Congress's intent. See *Basic Inc.*, 485 U.S. at 245–46.

36. *Basic Inc.*, 485 U.S. at 244 (quoting *In re LTV Sec. Litig.*, 88 F.R.D. 134, 143 (N.D. Tex. 1980)).

37. *Id.* at 245.

that presuming reliance was consistent with the broad congressional objective of facilitating investor reliance on the “integrity” of securities markets and further supported its conclusion on how stock prices are formed in well-developed markets.³⁸ As *further* support for presuming investor reliance, the *Basic* majority invoked the contemporary empirical evidence of stock-price formation and the related commentary on the implications of that literature for the conduct of securities class actions.³⁹ Thus, reliance was initially presumed on public policy considerations and then further supported by the majority’s understanding of the Efficient Market Hypothesis (EMH), the latter of which remains part of the case for the securities class action plaintiff. But *Basic* is opaque on just what it is that investors are presumed to rely on in such a well-developed market.

The *Basic* majority was clearly influenced by what it believed were the insights to be drawn from the EMH, citing at one point to works summarizing the tenets of the EMH.⁴⁰ Broadly stated, the EMH holds that publicly available information is rapidly incorporated in the price of publicly traded securities. It is safe to say that whatever the views of the EMH were when *Basic* was decided twenty-five years ago, today those views are substantially qualified.⁴¹ In light that much ink has been spilled since *Basic* was decided on the relative efficiency of capital markets and, particularly, the descriptive qualities of the EMH, it could be argued that *Basic* requires reassessment in light of the growing body of knowledge regarding the efficiency of markets.⁴²

38. *Id.* at 246.

39. *Id.* at 247 n.24 (citing to authorities reviewing studies bearing on the Efficient Market Hypothesis).

40. *Id.*

41. Criticisms challenging the tenets of the EMH abound. *See, e.g.*, Fischer Black, *Noise*, 41 J. FIN. 529, 532 (1986) (arguing that “[t]he increase in the amount of information trading does not mean that prices are more efficient”); Lawrence H. Summers, *Does the Stock Market Rationally Reflect Fundamental Values?*, 41 J. FIN. 591, 592 (1986) (“Thus the results [in this article] call into question the theoretical as well as empirical underpinnings of the Efficient Market Hypothesis.”). Joining the academics is one who has toiled long and well in the markets, George Soros. In George Soros, *Letters to the Editor: My Market Theory? Forget Theories*, WALL ST. J., Jan. 8, 2001, at A33, Soros finds that the theory regarding market efficiency distorts reality. Simply stated, neither investors nor markets perform in the way suggested by the EMH.

42. Indeed, recently the Court agreed to reconsider fraud on the market. *See* Halliburton Co. v. Erica P. John Fund, Inc., 134 S. Ct. 636 (2013) (granting certiorari to consider, among other things, whether the Court should overrule or modify the holding of *Basic* insofar as it recognizes the fraud on the market theory of reliance); Petition for Writ of Certiorari at i, Halliburton Co. v. Erica P. John Fund, Inc., No. 13-317 (U.S. Sept. 9, 2013).

Yet, a broad reassessment appears unnecessary given that the overarching tenet of *Basic*, reaffirmed in *Amgen*, is irrefutable: Stock prices in markets generally respond to public information that is financially significant. Instead, the true weakness in *Basic* is not its reliance on a then-developing body of work focused on how securities prices are formed, but that the majority extrapolated from that body of work a very different insight than the one set forth in the hypothesis; the majority used the EMH to prescribe how investors interact with securities markets. Simply stated, the weakness of *Basic* is that it drew conclusions from the EMH that are not within the prescriptive tenets of the hypothesis itself, regardless of the descriptive validity of the hypothesis. The majority erroneously invoked the EMH as a description of investor behavior, rather than the functioning of markets. An unvarnished application of the EMH, however, or some variant of its teachings, would be premising fraud on the market solely on price distortion, as did many pre-*Basic* decisions.

Basic did not abandon reliance, but presumed its presence by concluding that investors rely “on the integrity of the price set” in “well-developed markets.”⁴³ Because the EMH says nothing about what investors in fact do, the link between the EMH and how investors act is problematic. And, putting aside the EMH, there is little to suggest that investors are so naïve as to believe that materially misleading information never, or even seldom, enters into the pricing of a security. Fraudulent reporting, even though not epidemic, does occur, and with enough frequency to cause less than unquestioning faith in financial reporting.⁴⁴ And, because financial reporting can involve material misrepresentations that occur without culpable misbehavior, ex ante assumptions about misleading financial information must account for misreporting that is the product of culpable misconduct, as well as for misreporting that is not, which presumably is more prevalent than fraudulent misreporting. Simply put, material misrepresentations are a natural feature of the inherent imperfections that surround financial reporting such that this is a feature of assessing investment risk. Any belief that investors conform

43. *Basic Inc.*, 485 U.S. at 246–47.

44. See Donald C. Langevoort, *Reading Stoneridge Carefully: A Duty-Based Approach to Reliance and Third-Party Liability Under Rule 10b-5*, 158 U. PA. L. REV. 2125, 2140 (2010) (“Fraud distorts prices with some frequency, and no reasonable investor would ever assume otherwise by relying blindly on price integrity. Efficient markets price the risk of asymmetric information; they do not assume its absence.”).

their behavior to the tenets of the EMH—that there is no potential for future price movement based on publicly available information—must confront the reality that investors actively pursue gains based on publicly available information, a course of action directly at odds with the EMH. Clearly, regardless of the overall predictive quality of the EMH with respect to markets, the EMH is not a predictor of investor behavior. As such, it is a very slender reed on which to premise a presumption of how investors behave.

Regardless of weaknesses in *Basic* or the teachings of the EMH, lower courts have overreacted to *Basic*'s holding. They did so by restricting fraud on the market to individual securities they believed were traded efficiently⁴⁵ and by imposing a demanding requirement, among other conditions,⁴⁶ that market efficiency requires evidence that a firm's security reflected *all* publicly available information in order for causation to be derived via fraud on the market.⁴⁷ As a

45. See, e.g., *Bell v. Ascendant Solutions, Inc.*, 422 F.3d 307, 315–16 (5th Cir. 2005) (denying class certification due to low turnover of NASDAQ traded shares being inconsistent with their being traded in an efficient market); *Unger v. Amedisys Inc.*, 401 F.3d 316, 322, 325 (5th Cir. 2005) (denying class certification because shares of small-cap firm traded in OTCBB were believed not to be traded efficiently).

46. The leading case for such factors is *Cammer v. Bloom*, 711 F. Supp. 1264, 1286–87 (D.N.J. 1989). See also *Binder v. Gillespie*, 184 F.3d 1059, 1065 (9th Cir. 1999) (applying the *Cammer* factors). For a close analysis of the criteria used by the courts, see generally William O. Fisher, *Does the Efficient Market Theory Help us do Justice in a Time of Madness?*, 54 EMORY L.J. 843 (2005).

47. See, e.g., *In re PolyMedica Corp. Sec. Litig.*, 432 F.3d 1, 9–10 (1st Cir. 2005) (requiring evidence that a security's price responded rapidly to financially significant information); *Gariety v. Grant Thornton, LLP*, 368 F.3d 356, 367–68 (4th Cir. 2004) (“A reasonable investor will rely on the integrity of the market price, however, only if the market is efficient, because in an efficient market, ‘the market price has integrity[;] . . . it adjusts rapidly to reflect all new information.’” (alteration in original) (quoting Jonathan R. Macey & Geoffrey P. Miller, *Good Finance, Bad Economics: An Analysis of the Fraud-on-the-Market Theory*, 42 STAN. L. REV. 1059, 1060 (1990))); *Greenberg v. Crossroads Sys.*, 364 F.3d 657, 661 n.6 (5th Cir. 2004) (“[I]n an efficient market, it is assumed that all public information concerning a company is known to the market and reflected in the market price of the company's stock.”); *No. 84 Employer-Teamster Joint Council Pension Trust Fund v. Am. W. Holding Corp.*, 320 F.3d 920, 947 (9th Cir. 2003) (“[I]n a modern and efficient securities market, the market price of a stock incorporates all available public information.” (citation omitted)); *GFL Advantage Fund, Ltd. v. Colkitt*, 272 F.3d 189, 208 (3d Cir. 2001) (“[S]tock prices reflect all available relevant information about the stock's economic value [in an efficient marketplace.]”); *Joseph v. Wiles*, 223 F.3d 1155, 1163 n.2 (10th Cir. 2000) (finding that in an efficient market “the investor must rely on the market to perform a valuation process which incorporates all publicly available information, including misinformation” (citation omitted)); *Kowal v. MCI Comm'ns Corp.*, 16 F.3d 1271, 1276 n.1 (D.C. Cir. 1994) (“[I]n an efficient securities market all publicly available information regarding a company's prospects has been reflected in its shares' price.” (citation omitted)); *Freeman v. Laventhol & Horwath*, 915 F.2d 193, 197 (6th Cir. 1990) (“The fraud on the market theory rests on the assumption that the price of an actively traded security in an open, well-developed and efficient market reflects all available information about the value of a company.” (citing Peil v.

consequence, the conduct of securities fraud litigation occurs in a world with binary markets: those with efficiently-traded securities and those with inefficiently-traded securities. This is a condition most believe does not exist.⁴⁸

Courts have therefore engaged in the quest to identify stocks believed to trade in an efficient market. In doing so, they customarily refer to the *Cammer* factors in determining whether to certify a class based on fraud on the market. *Cammer v. Bloom*⁴⁹ identified the following factors to be considered in determining whether the subject stock traded in an efficient market: 1) percentage of shares traded weekly, 2) number of analysts following the issuer, 3) presence of market makers and arbitrageurs, 4) eligibility to enter the SEC's integrated disclosure procedures, and 5) responsiveness of the security's price to new information.⁵⁰ The most important factor is the cause and effect relationship between a company's disclosures and the resulting change in the price of its shares.⁵¹ The Fifth Circuit has observed that the last factor "goes to the heart of the 'fraud on the market' theory."⁵² The Fifth Circuit's observation may be a masterpiece of understatement: If there is proof of such a relationship between information and stock price movement, why should the other *Cammer* factors matter?

The post-*Basic* approach to fraud on the market has few, if any, supporters.⁵³ In addition to its most striking flaw, asserting that the EMH is itself prescriptive of probable investor behavior, it also uses

Speiser, 806 F.2d 1154, 1160 (3d Cir. 1986)).

48. See *supra* note 41.

49. 711 F. Supp. 1264 (D.N.J. 1989).

50. *Id.* at 1286–87.

51. *Id.* at 1291.

52. *Unger v. Amedisys Inc.*, 401 F.3d 316, 324 (5th Cir. 2005).

53. See, e.g., Jill E. Fisch, *The Trouble with Basic: Price Distortion after Halliburton*, 90 WASH. U. L. REV. 895, 899 (2013) (arguing that "the natural outgrowth of the Court's market-based approach to securities fraud justifies resolving the tension in *Amgen* by overruling that aspect of the *Basic* decision which retains a reliance requirement"); Donald C. Langevoort, *Basic at Twenty: Rethinking Fraud on the Market*, 2009 WIS. L. REV. 151, 154 (2009) ("Given the majority's instinct that plaintiffs should be entitled to rely on the integrity of the market price as undistorted by *fraud*, the tool turned out to be both unnecessary and dangerous." (emphasis added)); see also Fisher, *supra* note 46, at 847 (arguing that during the Internet, high-tech, and telecommunications bubble from 1998 to 2001, "courts [did] not produce justice when they appl[ie]d the efficient market, through event studies, to 10b-5 cases arising out of the bubble"); Jonathan R. Macey et al., *Lessons from Financial Economics: Materiality, Reliance, and Extending the Reach of Basic v. Levinson*, 77 VA. L. REV. 1017, 1018 (1991) ("[T]he focus of the Supreme Court's holding in *Basic* is misplaced: what determines whether investors were justified in relying on the integrity of the market price is not the efficiency of the relevant market but rather whether a misstatement distorted the price of the affected security.").

the EMH to draw the conclusion that investors rely on information through their presumed reliance on security *prices*. Thus, for an investor that does not rely on price, such as an indexer, style investor, or one guided by portfolio theory, fraud on the market would not be available. For this group, price, and hence price distortion, is not believed causally important to their decisions so they are outside *Basic's* approach to fraud on the market. These conclusions lack substantive support.

Consider that there is a wealth of evidence that investors have heterogeneous expectations.⁵⁴ Thus, in their response to public information, investors can be expected to hold different views on the significance of the information. In part, this is because they are cognitively bound; their individual endowments will bias their interpretation and reaction to the information, particularly to financial information for which there is always inherent uncertainty as to its impact on the future.⁵⁵ Because there is no reason to suspect that such cognition biases point in one direction, they may well not bias stock prices, but they can produce a good deal of noise around what might be thought to be the likely equilibrium price.⁵⁶ Yet, security prices are noisy and the assumption should be that investors, on average, trade with a healthy understanding of the noise that surrounds security prices and the sometimes-unreliable nature of information that impacts security prices.

Compounding this problem, lower courts limit fraud on the market to securities that meet certain conditions they believe qualify a market as efficient. As seen, there is nothing in the EMH that describes what investors in fact do. More specifically, there is nothing in the EMH holding that investors react differently in trading publicly traded stocks that are within the *Cammer* factors than how they react when trading in publicly traded shares of stocks in smaller capitalization issuers that do not meet all the *Cammer* factors.

54. See, e.g., Sanford J. Grossman & Joseph E. Stiglitz, *Information and Competitive Price Systems*, 66 AM. ECON. REV. 246, 252 (1976) (finding that, because investors have such different levels of understanding of likely significance of information, it is not reasonable to expect a security's price to transfer information from informed to less informed investors).

55. See generally Lynn A. Stout, *The Mechanisms of Market Inefficiency: An Introduction to the New Finance*, 28 J. CORP. L. 635 (2003) (reviewing why the EMH is likely qualified by investors' heterogeneous expectations, their cognitive biases, and practical limits on arbitrage).

56. See generally Ronald J. Gilson & Reimier Kraakman, *The Mechanisms of Market Efficiency Twenty Years Later: The Hindsight Bias*, 28 J. CORP. L. 715, 738 (2003) (arguing that in order to disturb share prices the cognitive biases must be both pervasive and correlated, and arbitrage mechanisms must fail).

Furthermore, since so much of the fraud on the market litmus test turns on evidence suggesting stock prices will respond quickly to releases of public information, why should not the focus be on the stock's price response to information of the same import that is the subject of the suit? That is, if incorporation of information into a security's price is the standard for fraud on the market, then why is it not relevant to testing that condition to examine how the security's price has responded to information believed analogous to the allegedly fraudulent information? To the extent *Basic* rests on assumptions about investors, should it not be open for discussion whether investors likely believed that information of a certain type would, for that security, impact the security's price?

II. ENTER *AMGEN*

The above-described faults with *Basic* and its progeny provide important background for understanding the true significance of the Supreme Court's recent decision, *Amgen Inc. v. Connecticut Retirement Plans and Trust Funds*. In *Amgen*, the class was composed of investors who purchased Amgen shares during a period in which Amgen allegedly made several material misrepresentations by failing to disclose adverse information about two of its major pharmaceutical products, Epogen and Aranesp.⁵⁷ The issues before the Court were whether, as a condition of certification of the class, the plaintiffs should be required to establish the materiality of the alleged misrepresentations and if the defendant should be accorded the opportunity to rebut the assertion of materiality by showing that the truth behind each of the alleged misrepresentations had already entered the marketplace.⁵⁸ Defendants predictably wished these issues to be part of the class certification decision so as to reduce the hydraulic pressure that class certification places on settlement even when these issues are unresolved.⁵⁹ Correlatively, the plaintiffs

57. A full narrative of the facts appears in *Conn. Ret. Plans and Trust Funds v. Amgen Inc.*, 660 F.3d 1170 (9th Cir. 2011). *See id.* at 1173 (“[A]lleged misstatements and omissions, according to the complaint, inflated the price of Amgen’s stock when Connecticut Retirement purchased it. Later, corrective disclosures allegedly caused Amgen’s stock price to fall, injuring Connecticut Retirement.”).

58. *See Amgen Inc. v. Conn. Ret. Plans and Trust Funds*, 133 S. Ct. 1184, 1191 (2013) (“The issue presented concerns the requirement stated in Rule 23(b)(3) that ‘the questions of law or fact common to class members predominate over any questions affecting only individual members.’”).

59. *Id.* (“According to Amgen, certification must be denied unless Connecticut Retirement *proves* materiality, for immaterial misrepresentations or omissions, by definition,

naturally preferred fewer substantive determinations in the all-critical class certification stage.

Amgen's significance is not how it resolved these opposing tugs. As examined more closely below, four Justices joined Justice Ginsburg's opinion holding that a factually-based finding that a material misrepresentation occurred is not a precondition to class certification.⁶⁰ The *Amgen* majority reasoned that, because issues to be resolved for certification of the class are whether common questions of law and fact predominate, it is not necessary to resolve whether materiality exists.⁶¹ For the majority, conditioning certification on the plaintiffs' proving materiality of the alleged misrepresentation would amount to "put[ting] the cart before the horse";⁶² if at trial it should be determined the alleged omissions were not material, this would be a conclusion binding on all class members. Justice Alito concurred, but did so by expressing his interest in revisiting the substantive theory on which common questions in securities fraud claims depend—the fraud on the market presumption of market causation.⁶³ Less cautious were the dissenters, who not only believed that proof of materiality was the *sine qua non* for class certification, but openly expressed disapproval of the fraud on the market theory.⁶⁴ Thus, we find in *Amgen* the dog that would not bark—the continuing vitality of the securities class action, though four Justices are eager to revisit *Basic*.

The majority opinion in *Amgen* repeatedly references "efficient"⁶⁵ and "efficiency"⁶⁶ when describing the instances in which the fraud on the market approach to causation would be allowed. These expressions were used to describe the natural incorporation of

would have no impact on Amgen's stock price in an efficient market.").

60. *Id.* Chief Justice Roberts and Justices Kagan, Breyer, and Sotomayor joined the majority opinion.

61. *Id.*

62. *Id.*

63. *Id.* at 1204 (Alito, J., concurring).

64. *Id.* at 1208 n.4 (Thomas, J., dissenting). Though limiting his dissent to whether the majority followed "*Basic's* dictates," Justice Thomas, joined by Justices Kennedy and Scalia, observes, "[t]he *Basic* decision itself is questionable," referring to the only four Justices then approving fraud on the market and pointing toward the *Amgen* majority's misgivings regarding whether market efficiency is, as *Basic* has been interpreted, to be a binary—yes or no—question, or whether it "operates differently depending on the information at issue." *Id.* Justice Scalia separately dissented but joined the part of Justice Thomas's dissent inviting reconsideration of *Basic*. *Id.* at 1206.

65. *See, e.g., id.* at 1190, 1193 (majority opinion).

66. *See, e.g., id.* at 1190, 1192.

financially significant information into security prices.⁶⁷ The significance of *Amgen* is that it moves from this observation to conclude that *most* investors “rely on the security’s market price as an unbiased assessment of the security’s value in light of all public information.”⁶⁸ Missing in *Amgen* is the emphasis present in *Basic* that the critical reliance is that of investors on the market;⁶⁹ we can therefore find in *Amgen* a subtle shift from the view that some markets have characteristics that attract investors’ reliance on security prices to a broader view where the focus is on the pricing process and investor reliance on that process and not the market as such. Moreover, *Amgen* does not require, as a condition of such efficiency, evidence that the security historically reflected *all* material public information.⁷⁰ This moves the discourse away from the view that pricing is binary, where for some securities the stock’s price responds to financial information and for other securities there is believed to be no such response.

Amgen moves to the defensible position that stock prices for individual securities respond differently depending on the nature of the information.⁷¹ For a stock to be within the reach of fraud on the market, this need not always be the case—but generally. That is, the majority expressly recognized that a security could be deemed traded in an efficient market if its shares “generally” reflected publicly available information.⁷² *Amgen* offers the following explanation of how the fraud on the market presumption is justified:

This presumption springs from the very concept of market efficiency. If a market is *generally* efficient in incorporating publicly available information into a security’s market price . . . it is reasonable to presume that *most* investors—knowing that they have little hope of outperforming the market in the long run based solely on their analysis of publicly available information—will rely on the security’s market price as an unbiased assessment of the security’s value in light of all public information. Thus, courts may presume that investors trading in efficient markets indirectly rely

67. *Id.* at 1192.

68. *Id.*

69. *See Basic Inc. v. Levinson*, 485 U.S. 224, 247 (1988) (“An investor who buys or sells stock at the price set by the market does so in reliance on the integrity of that price.”).

70. *See Amgen*, 133 S. Ct. at 1192 (“If a market is *generally* efficient in incorporating publicly available information into a security’s market price, it is reasonable to presume that a particular, public, material misrepresentation will be reflected in the security’s price.”).

71. *Id.* at 1197 n.6.

72. *Id.* at 1192.

on public, material misrepresentations through their “reliance on the integrity of the price set by the market.”⁷³

On the other hand, *Amgen* does not expressly reject reliance. Thus, the *Basic* mystery continues. Namely, what showing beyond loss causation⁷⁴—the linkage of the misrepresentation to an actual economic loss by the investor—is required to invoke fraud on the market? The opinion suggests that the *Amgen* majority’s understanding of what constitutes an efficient market is a market that regularly reflects publicly available information.⁷⁵ At a minimum, *Amgen*’s more relaxed view would appear to reject the lengthy list of criteria that lower courts have developed as the gateway for class certification based on fraud on the market, and it certainly rejects the rigid litmus test that fraud on the market is available only for securities whose trade demonstrates that *all* material information is rapidly reflected in the security’s price.⁷⁶ This observation invites lower courts to consider what weight to give in those isolated instances in which a security’s price does not respond to financially significant information: Is the absence of observable price movement evidence that the market is inefficient or that an efficient market is documenting that the information was not financially significant? In all respects, *Amgen* can be seen as moving the framework of fraud on the market closer to what is supported by the efficient market hypothesis literature. Simply stated, *Amgen* invites the testing of market efficiency by its tasting—namely evidence of how a particular security’s price has responded to financial announcements.

73. *Id.* at 1192–93 (emphasis added) (quoting *Basic*, 485 U.S. at 245). Central to *Amgen*’s holding is *Amgen*’s concession that the alleged misrepresentations were public and that its securities traded in an efficient market so that “the market for *Amgen*’s securities promptly digested current information regarding *Amgen* from all publicly available sources and reflected such information in *Amgen*’s stock price.” *Id.* at 1193.

74. Professor Donald Langevoort reports that at least Justice Brennan, part of the thin plurality opinion in *Basic*, preferred a more permissive approach to causation, in which proof that the misrepresentation distorted the security’s price would establish causation without inquiry into any form of investor reliance. Langevoort, *supra* note 53, at 157 n.25. *Amgen* would appear not to change the result in *GAMCO Investors, Inc. v. Vivendi, S.A.*, 917 F. Supp. 2d 246, 262 (S.D.N.Y. 2013) (denying plaintiff’s motion for summary judgment because there was a question of fact as to whether the security’s price, even though distorted by fraudulent statements, assumed any importance in the investment model used by the plaintiff investor).

75. See *Amgen*, 133 S. Ct. at 1192 (noting that in an efficient market, all publicly available information is generally incorporated into a security’s price).

76. See *supra* note 35.

Earlier, in *Erica P. John Fund v. Halliburton*,⁷⁷ the Court rejected the Fifth Circuit's class certification requirement of establishing factual allegations that support the claims of loss causation.⁷⁸ As in *Amgen*, Chief Justice Roberts, writing for a unanimous court, reasoned that requiring proof of loss causation as a condition to certify the class "contravenes *Basic*'s fundamental premise—that an investor presumptively relies on a misrepresentation so long as it was reflected in the market price at the time of his transaction."⁷⁹ However, one can appreciate that following *Dura Pharmaceuticals, Inc. v. Broudo*,⁸⁰ plaintiffs must allege that the misrepresentation caused an economic loss; in fraud on the market cases this is customarily satisfied with a factual allegation that the security's price changed in connection with the release of corrective or truthful information.⁸¹ It thus appears that what the defendants sought in both *Amgen* and *Halliburton* was an opportunity to challenge forensically the factual allegations that the material omissions impacted the security's price. In *Amgen*, because the defendant had conceded its stock traded in an efficient market and that the challenged statements were public,⁸² there was little else the defense could raise to prevent class certification. *Halliburton* raised the need to prove loss causation at the class certification stage, before making its motion to dismiss—the customary method of challenging the sufficiency of the plaintiff's allegations.⁸³ Presumably, it chose to do so believing that a favorable resolution was more likely at a hearing of the type customarily held to render findings relevant to certifying the class, compared with the more sterile, removed process of a motion to dismiss. So viewed, we might consider that *Halliburton*'s impact on the defendant's arsenal and the plaintiff's victory is merely shifting to a different point in the litigation the need to set forth specific allegations of loss. That is, price movement is not taken off the litigation or settlement table; price movement remains a demanding and frequently mortal requirement

77. 131 S. Ct. 2179 (2011).

78. *Id.* at 2187 (holding that the Fifth Circuit erred in requiring evidence of loss causation as a condition to certifying the class). The Supreme Court, applying similar reasoning to that of *Amgen*, stressed that loss causation did not implicate commonality as does reliance, and thus that inquiry into loss causation was not germane to class certification. *Id.* at 2186.

79. *Id.*

80. 544 U.S. 336 (2005).

81. *See, e.g., Metzler Inv. GmbH v. Corinthian Colls., Inc.*, 540 F.3d 1049, 1072 (9th Cir. 2008) (dismissing for failure to plead facts establishing loss causation).

82. *Amgen Inc. v. Conn. Ret. Plans and Trust Funds*, 133 S. Ct. 1184, 1193 (2013).

83. *Halliburton*, 131 S. Ct. at 2185.

of the plaintiff's case that can be tested as early as a motion to dismiss.

Securities class action plaintiffs would have suffered a serious loss had *Amgen* been decided differently and the burden placed on the class to support a finding that Amgen's stock price changed in connection with the alleged nondisclosures. As seen earlier, *Amgen* was a nondisclosure case.⁸⁴ Had the plaintiff in such a case been required, as a condition to class certification, to prove stock price reaction to the alleged misrepresentations, it would likely have been unable to comply. This is because a material nondisclosure frequently affirms the status quo and thus is not "new" information in the hands of investors. Price change would be all the more difficult to isolate where, as was the case in *Amgen*, the effect of the nondisclosure is to confirm investor expectations. In this case, the information that is released would not be accompanied by any detectable market response because it merely repeats what was expected. A nondisclosure in a public market is existential: it leaves no imprint on the path of a stock's price. Thus, class actions premised on nondisclosure would most certainly have been relics had *Amgen* been differently decided. To be sure, upon disclosure of the omitted facts, a market correction would not only bear on the impact of the omitted fact, but also serve to confirm the materiality of that earlier omitted fact. However, as *Halliburton* reasoned,⁸⁵ the defendants may be able to argue successfully that the price change that is then observed is unrelated to the facts allegedly omitted earlier. *Amgen*, by holding that the focus of the class certification inquiry is whether common questions predominate places more weight on the pretrial motion to dismiss.

Price movements of a security can thus assist the overall causation inquiry. Both *Amgen* and *Halliburton* exclude this information from the class certification stage. It should not be overlooked that a key step toward resolving causation, and indeed the appropriateness of class certification, is determining whether the alleged material omission was committed, and if so whether it impacted the security's price so that it affected all class members. Price movement in connection with the misrepresentation, or even disclosure of the truth, is also relevant to whether the subject security is traded in an efficient market so that fraud on the market is available. It is likely more

84. See *supra* note 57 and accompanying text.

85. See *Halliburton*, 131 S. Ct. at 2186.

efficient with respect to judicial resources to simply reorient the focus to the pre-*Basic* approaches discussed earlier—particularly, the emphasis on price distortion being the lynch pin for causation.⁸⁶ But if that is not to occur, it remains consistent with *Basic*, *Halliburton*, and *Amgen* to examine whether, for the individual security, there is a record of price sensitivity to information of the order of the alleged misrepresentation, which would suggest investors likely relied on the security's price to reflect such information. At the same time, the absence of price movement in a nondisclosure case, such as in *Amgen* or even in a misstatement case such as *Basic*, does not equate to inefficiency. Information that is not new to the market cannot be expected to move a security's price. Thus, claims premised on a failure to disclose are essentially alleging it was a violation to perpetuate the status quo. Similarly, announcements confirming developments for which investors had no doubts is not new information at all. In neither case would we expect to see a price change. Thus, materiality must be resolved on the merits; however, the matter of class certification under *Basic* raises a different question that can be resolved without examining only the market's response to the particular misrepresentation.

III. THE RIGHT OF PASSAGE

As seen, *Amgen* and *Halliburton* each build on *Basic*. Neither *Basic* nor *Amgen* permit fraud on the market on proof a security's price was distorted. Instead, each in its own way presumes investors rely on security prices reflecting publicly available information. Thus, loss causation does not do double duty; a separate allegation of transaction causation—reliance on the market—is required. We can find in all three decisions the belief that the heart of fraud on the market is that security prices impound financially significant information as each decision is focused on evidence that a security's price has been impacted by public information. It is on this process that investors rely. If the plaintiffs make this showing, fraud on the market is available because the security is believed to be traded in such a market. Hence, the question: What are the characteristics of such a market?

86. See *supra* note 25 and accompanying text.

There is an enormous literature examining the broad questions of whether, to what extent, and under what conditions markets perform in a manner consistent with the EMH. The early empirical studies—those that formed not just the bedrock of the EMH, but more importantly framed the EMH literature relied upon by *Basic*—logically began with listed, large-cap companies.⁸⁷ There are two significant reasons why the larger issuers became the dominant focus of the research. First, if an investigator wished to test the hypothesis, she would intuitively begin by investigating stock prices for large-cap companies. It is much more intuitive to hypothesize that the stock of such firms trade in markets that have multiple forces that will move their prices rapidly to respond to new information; they are deep markets that therefore attract institutional investors who demand liquidity. And, where the institutions exist, there is a demand curve for analysts and research that will guide the institution's trading. Hence, they trade in not just an environment that is informationally rich but also in an environment that attracts a crowd eager to arbitrage new kernels of information as it becomes available. Second, academics follow the wise guidance of Dirty Harry: They know their limitations. The life's milk of the empiricist is the database. Thus, early EMH research was guided by firms that were included in such well-recognized databases as CRSP and Compustat, for which the researcher could efficiently extract information to examine stock prices in response to public announcements. Thus, the earliest studies by Nobel Laureate Eugene Fama had a very limited focus; he examined only companies among the exclusive club making up the Dow Jones Industrial Average.⁸⁸ The next wave of work broadened the inquiry to include stocks listed on the New York Stock Exchange.⁸⁹ These were the studies that shaped the contemporary

87. See generally Roger J. Dennis, *Materiality and the Efficient Capital Market Model: A Recipe for the Total Mix*, 25 WM. & MARY L. REV. 373 (1984).

88. Eugene F. Fama & Marshall E. Blume, *Filter Rules and Stock-Market Trading*, 39 J. BUS. 226, 228 (Supp. 1966); Eugene F. Fama, *The Behavior of Stock-Market Prices*, 38 J. BUS. 34, 45 (1965).

89. See, e.g., William H. Beaver, *The Information Content of Annual Earnings Announcements*, 6 J. ACCT. RES. 67, 70 (Supp. 1968) (sampling annual earnings announcements released by New York Stock Exchange member firms); Peter Lloyd Davies & Michael Canes, *Stock Prices and the Publication of Second-Hand Information*, 51 J. BUS. 43, 46 (1978) (examining stock price responses to "Heard on the Street" column recommendations using a sample limited to stocks that were "almost all from the NYSE"); Eugene F. Fama et al., *Adjustment of Stock Prices to New Information*, 10 INT'L ECON. REV. 1, 3 (1969) (limiting analysis of stock splits data to firms listed on the New York Stock Exchange); Michael Firth, *The Information Content of Large Investment Holdings*, 30 J. FIN. 1265, 1267 (1975)

EMH literature. The literature did not reject the EMH for non-listed or small-cap firms; yet, that group of firms was, and largely continues to be, ignored. They are also outside the contemporary applications of fraud on the market. But need this be the case?

There is some research on small-cap firms. Not surprisingly, the research supports our intuition that the stock prices of these firms are responsive to material financial information. That is, to the fraudster behind “pump and dump” schemes that plague the small, non-reporting companies that trade in the “Pink Sheet Market,” a core feature of his abusive practice is the circulation of unfounded rumors with the intended effect of driving a stock’s price up.⁹⁰ Because the firms are thinly traded, a slight shift in demand has an immediate impact on the security’s price, allowing the unscrupulous fraudster who planted the rumor to dump his shares at a substantial profit. Hence, a study of Pink Sheet traded securities documented that for such firms trading jumped dramatically in connection with favorable “touting” of the firms.⁹¹ Also, the imposition of reporting requirements for securities traded on the Over-the-Counter Bulletin Board that improved the quality of disclosures had a positive effect on the firms’ shares and improved liquidity for investors.⁹² Again, this is a finding consistent with financially significant information impacting security prices, even in small-cap firms. Professor Kate Litvak provides an interesting insight, that returns were affected for securities traded on the Pink Sheet market by the market’s operator assigning classifications based on disclosure practices of the subject firm.⁹³ Of particular interest, the assigned designations were based

(investigating the impact of announcements of equity acquisitions with a premium of 10 percent or larger in “quoted companies”); R. Richardson Petit, *Dividend Announcements, Security Performance, and Capital Market Efficiency*, 27 J. FIN. 993, 997 (1972) (analyzing the impact of dividend announcements on the stock prices of New York Stock Exchange firms). Cf. Ross Watts, *The Information Content of Dividends*, 46 J. BUS. 191, 197 (1973) (selecting information from Standard and Poor’s Compustat and Center for Research in Security Prices databases which identified firms “tend[ing] to be larger and less risky than the average firm”).

90. See generally JAMES D. COX ET AL., *SECURITIES REGULATIONS: CASES AND MATERIALS* 406–07 (7th ed. 2013) (examining penny stock frauds).

91. Laura Frieder & Jonathan Zittrain, *Spam Works: Evidence from Stock Touts and Corresponding Market Activity* 31 (Harvard Public Law Working Paper No. 135), available at <http://ssrn.com/abstract=920553> (explaining that trading activity increased from 4 percent to 70 percent on a day when touting occurred).

92. Brian J. Bushee & Christian Leuz, *Economic Consequences of SEC Disclosure Regulation: Evidence from the OTC Bulletin Board*, 39 J. ACCT. & ECON. 233, 257 (2005) (noting that many firms chose to avoid the reporting requirements, thus migrating to the Pink Sheet market).

93. Kate Litvak, *Summary Disclosure and the Efficiency of the OTC Market: Evidence*

solely on publicly available information, thus suggesting that there was information content in the market operator's judgment regarding the disclosure practices of subject firms. Each of these studies of the stock prices of small-cap firms challenges the contemporary binary approach to market efficiency. Each of these studies shows price-information correlations consistent with the tenets of *Basic* and *Amgen*, even though they focus on firms that the courts routinely exclude from fraud on the market.

None of the preceding studies of stock price behavior for small-cap firms would, pursuant to *Basic*'s formulation, rebut the presumption of investor reliance:

Any showing that severs the link between the alleged misrepresentation and either the price received (or paid) by the plaintiff, or his decision to trade at a fair market price, will be sufficient to rebut the presumption of reliance. For example, . . . if, despite petitioners' alleged fraudulent attempt to manipulate market price, news of the merger discussions credibly entered the market and dissipated the effects of the misstatements, those who traded *Basic* shares after the corrective statements would have no direct or indirect connection with the fraud. Petitioners also could rebut the presumption of reliance as to plaintiffs who would have divested themselves of their *Basic* shares without relying on the integrity of the market. For example, a plaintiff who believed that *Basic*'s statements were false and that *Basic* was indeed engaged in merger discussions, and who consequently believed that *Basic* stock was artificially underpriced, but sold his shares nevertheless because of other unrelated concerns, *e.g.*, potential antitrust problems, or political pressures to divest from shares of certain businesses, could not be said to have relied on the integrity of a price he knew had been manipulated.⁹⁴

Moreover, the evidence that prices of small-cap firms move in response to securities prices would appear consistent with the fundamental criterion that underlies *Basic*, *Halliburton*, and now *Amgen*'s fundamental premise—that an investor presumptively relies on a misrepresentation so long as it was reflected in the market price at the time of his transaction.⁹⁵ At the same time, passive forms of

from the *Pink Sheets Experiment* 3, (May 3, 2009) (working paper), available at <http://ssrn.com/abstract=1443595>.

94. *Basic Inc. v. Levinson*, 485 U.S. 224, 248–49 (1988) (footnotes omitted).

95. *Erica P. John Fund, Inc. v. Halliburton*, 131 S. Ct. 2179, 2186 (2011).

investing, described earlier,⁹⁶ would appear a basis for removing that class of investors from fraud on the market claims since price is not a factor in their reliance.⁹⁷

As seen, the EMH does not describe how or why investors act as they do. Earlier, different types of investment approaches were described.⁹⁸ For some of these approaches, and most clearly for the classic investor, there most certainly is reliance on prices in response to truthful financial reports. But in today's market, the image of the classic investor is at best quaint and even dated. Today, indexing and algorithmic investing are so commonplace such that the bold image upon which *Basic* rests is challenged. It is too easy to dismiss the indexer and algorithmic investor as not trading on the basis of reliance on price, but other factors. They each may be seen as little more than a dart thrower whose aim is driven by a heuristic, albeit one not premised on price. As such, they would appear to fall within the above-quoted dicta of *Basic* regarding grounds for rebutting the presumed reliance.⁹⁹

It is here that the role of presumption comes into the analysis. The foundation of *Basic* was not obeisance to the EMH, but rather Justice Blackmun's reasoning of the useful role of presumptions and what considerations justify resort to a presumption:

Presumptions typically serve to assist courts in managing circumstances in which direct proof, for one reason or another, is rendered difficult. . . . Arising out of considerations of fairness, public policy, and probability, as well as judicial economy, presumptions are also useful devices for allocating the burdens of proof between parties. . . . The presumption of reliance employed in this case is consistent with, and, by facilitating Rule 10b-5 litigation, supports, the congressional policy embodied in the 1934 Act. In drafting that Act, Congress expressly relied on the premise that securities markets are affected by information, and enacted legislation to facilitate an investor's reliance on the integrity of those markets.¹⁰⁰

96. See *supra* pp. 1–3.

97. Cf. *GAMCO Investors, Inc. v. Vivendi S.A.*, 927 F. Supp. 2d 88, 101–02 (S.D.N.Y. 2013) (dismissing the suit because the facts misrepresented did not assume importance in the professional trader's investment model).

98. See *supra* pp. 1–3.

99. See *supra* note 94 and accompanying text.

100. *Basic Inc. v. Levinson*, 485 U.S. 224, 245–46 (1988).

Just as the dart thrower places unqualified trust in both the EMH and the pricing of securities his darts find, an important part of the indexer's strategy is the belief that markets are sufficiently trustworthy so that such passive investment is consistent with the advisor's fiduciary obligations.¹⁰¹ An investor's presumed reliance on market integrity, a point repeatedly emphasized in *Basic*,¹⁰² is likely more important to passive investors than active ones. Thus, much of the source of *Basic*'s presumption of investor reliance was grounded in congressional intent. To be sure, the Court further supported its conclusion by observing that in light of studies of stock prices in well-developed markets, "common sense and probability" further supported the presumption.¹⁰³ But more emphasis can be placed on *Basic*'s over-arching rationale about the role presumptions should play in resolving disputes.

The Roberts Court utilized presumptions, much like the Court did in *Basic*. The Roberts Court repeatedly anchors resort to a presumption in presumed congressional intent and the quest to conserve judicial resources. Though the Roberts Court's framework is similar to *Basic*'s—congressional intent¹⁰⁴ and judicial economies informed by practical realities¹⁰⁵—the case outcomes tend to narrow rather than expand access to the courts. But of overriding importance in these decisions, as well as *Basic*, is congressional intent.

Notably, Congress has not directly approved fraud on the market. However, its extensive reforms in the Private Securities Litigation Reform Act of 1995 (PSLRA) clearly recognized not only private rights of action, but also addressed a concern for causation that could

101. See *supra* notes 6–7.

102. See, e.g., *Basic*, 485 U.S. at 246–47 (“An investor who buys or sells stock at the price set by the market does so in reliance on the integrity of that price.”).

103. *Id.* at 246.

104. See *Kiobel v. Royal Dutch Petroleum*, 133 S. Ct. 1659, 1664 (2013) (applying the well-established canon of statutory construction that laws are presumed not to apply extraterritorially); *Morrison v. Nat'l Austl. Bank. Ltd.*, 130 S. Ct. 2869, 2878 (2010) (same); *Ill. Tool Works, Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 31 (2006) (rejecting presumption of market power linked to patented product for antitrust cases because Congress eliminated the market power presumption in patent misuse cases); *Martin v. Franklin Capital Corp.*, 546 U.S. 132, 135 (2005) (recognizing presumption of fee award in civil rights litigation, but deciding no fee award was appropriate for successful remand of the case to state court).

105. See *Maryland v. Shatzer*, 559 U.S. 98, 106 (2010) (holding that to conserve judicial resources, there is a presumption of voluntariness on the part of the defendant who responds to questioning more than fourteen days after invoking his request for an attorney); *Clark v. Arizona*, 548 U.S. 735, 766 (2006) (upholding Arizona's rule barring mental-disease and capacity evidence short of insanity from offsetting evidence of mens rea).

only apply in open-market fraud cases such as fraud on the market cases. For example, the PSLRA established a procedure for selecting a lead plaintiff for any securities class actions¹⁰⁶ and limits any plaintiff's recovery by the mean trading price of the security within a ninety-day window of the truthful disclosure.¹⁰⁷ The latter provision addresses the case where a material decline in a security's price accompanies disclosures that the plaintiff alleges were admissions of earlier fraudulent reporting, but the market, on reflection, significantly bounces back. The reasoning being: No harm, no foul—or at least one having a lower impact. Minimally implicit in this provision is Congress's belief that markets can overreact but are efficient over some period of time. Congress's stated ninety days is somewhat corrective of such overreaction. The provision is also suggestive that Congress believes markets are noisy, a fact supported as well by contemporary EMH research. Congress therefore provided a means to address one concern for noisy markets: the ninety-day post-corrective disclosure mean trading price as a check on volatility that otherwise would enhance the plaintiff's damage claims. Seeing as this provision also addresses class action procedures, Congress not only understood that markets could be so volatile, but that the securities traded in such markets would be subject to class action suits that necessarily would be premised on fraud on the market. Hence, volatility and short-term corrections could be expected for securities subject to fraud on the market suits.

Thus, congressional intent supportive of fraud on the market can easily be located and that intent remains consistent with *Basic*'s invoking a presumption of reliance where appropriate. The Supreme Court in both *Basic* and *Amgen* believed that central to investor reliance is the process by which public markets imbed financially significant information into stock prices.¹⁰⁸ It is reliance, or rather trust in this process, that investors rely in ways that the Court believed

106. 15 U.S.C.A. § 78u-4(a)(3) (West 2013).

107. *Id.* § 78u-4(e).

108. *See Amgen Inc. v. Conn. Ret. Plans and Trust Funds*, 133 S. Ct. 1184, 1192 (2013) (“If a market is generally efficient in incorporating publicly available information into a security’s market price, it is reasonable to presume that a particular, public, material misrepresentation will be reflected in the security’s price.”); *Basic*, 485 U.S. at 245–46 (“In drafting [the Exchange] Act, Congress expressly relied on the premise that securities markets are affected by information, and enacted legislation to facilitate an investor’s reliance on the integrity of those markets.”); *id.* at 246 (“Recent empirical studies have tended to confirm Congress’ premise that the market price of shares traded on well-developed markets reflects all publicly available information, and, hence, any material misrepresentations.” (footnote omitted)).

satisfied the reliance requirement for fraud on the market. What appears most consistent with the reasoning in both *Basic* and *Amgen* is evidence supporting the investor's dependence on the integrity by which the pricing of shares occurs in the market. Certainly the classic investor places faith in the information relied on to trade and presumably this extends to faith that share prices reflect publicly available information. The indexer and style investor also place faith in the market's pricing mechanism. Consider that each type of trader is most likely an institution whose investment actions are subject to fiduciary obligations owed to the beneficiaries of the managed funds. Without trust in the markets in which trades are made, the funds could hardly be seen to act consistent with these obligations. Clearly, if faith is to be found in the integrity of the stock pricing process, it would be among the quintessential indexed fund. Similarly, the modeler would not be comfortable with reliance on an algorithm if there was not faith that the trades directed by the equation would be carried out in a market whose parameters for risk, including the risk of misinformation, were calculated. And the dart thrower is perhaps the most trusting of all; the dart thrower has so much belief in the market to believe it is not worth second-guessing choices that fate would otherwise command.

CONCLUSION

After *Amgen* reliance continues to be a requirement for invoking fraud on the market. Despite some slight clarification of how fraud on the market is to be applied, the Court has not specified just what form reliance is to take. As developed here, the muddle was created by *Basic*'s invocation of the EMH to support what the EMH does not address—how investors act in an efficient market. Nor did *Basic* or *Amgen* provide much guidance as to what is an efficient market and just what “efficient” means under fraud on the market. The opaqueness is likely due to the serious disconnect between the EMH, our markets, and most particularly how investors behave.

The path forward from this Court-created conundrum is straightforward enough. Because reliance is required and reliance was stated in *Basic* to be market-centric, the proof of reliance should be met by allegations that investors believed in the integrity of the stock pricing function typically provided for that security's price. This would turn not on all the *Cammer* factors but on evidence of how that security's price has generally responded to material non-public

information. As seen earlier, this factor dwarfs the other factors, such as the number of analysts, the presence of institutional investors, the depth of the market, etc.¹⁰⁹ The real proof here is in observing how the stock's price generally responds to information of the type alleged to have been omitted or misstated. This would represent an expansion of the availability of fraud on the market. Equally important, evidence that investors are indexers, modelers, or even the proverbial dart thrower should not result in automatic disqualification in the face of understanding that these positions naturally assume reliance, not distrust, on the integrity of the process by which stock prices are formed. This approach is consistent with Congress's embrace of open-market frauds in enacting the PSLRA. Presumptions are, of course, rebuttable, as *Basic* recognized. *Basic* placed its embrace on a presumption jointly premised on the expectations of investors regarding the integrity of securities markets, as well as Congress's efforts to preserve their integrity. This presumption should remain an unchallenged bedrock for fraud on the market as an instrument of important public policy.

109. See *supra* notes 51–52 and accompanying text.