ACCOUNTING FOR BAD NEWS: SECURITIES FRAUD LITIGATION AND THE EQUAL APPLICATION OF MARKET EFFICIENCY

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ABSTRACT:

The Fraud-on-the-Market theory holds that high volume markets, such as the New York Stock Exchange, effectively incorporate all available information of present and expected value into a security's price. As endorsed by the Supreme Court of the United States, fraud on the market serves an important procedural role within the context of securities litigation by providing a general reliance presumption for all investors. An investor, or class of investors, is able to sue upon a claim of management misrepresentation without having to show actual reliance on the fraudulent information. When a market is assumed to be efficient, misinformation is deemed to defraud investors who have relied upon the integrity of the market itself. The presumption of market efficiency may thus be seen as an aspirational device, for placing the costs of rebuttal upon a corporation is said to encourage market transparency and the very same integrity of information that is assumed theoretically.

For the soundness of market information to be encouraged through such a litigation presumption, the effect should not become counter-distorting through the double compensation of litigation loss. If fraud on the market is to be applied with consistent logic, then one must assume that the instant a misrepresentation is made public that rational investors will automatically discount the stock price to account for the inevitable class action suit that will arise. A post misrepresentation fall in share price generally serves as the basis for securities fraud claims of loss. Yet, this entails that plaintiffs are able to recover on a market valuation that includes both the diminishment in the asset due to fraud and the anticipated cost of its future litigation. Unlike traditional fraud recovery, the operation of an anticipatory market incorporates litigation outcomes into asset valuation at the time of awareness. Accordingly, damage recovery may unwittingly grant relief on a loss assessment that is composed of two factors: (1) the market assessment

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of asset devaluation due to fraud; and (2) the market prediction of the very same plaintiff recovery. One can then see that plaintiffs have their litigation recovery count twice: as they receive it from the court, and as it formed the basis of the very amount of claimed loss. In response to this problem, the following Article draws upon methods of alternative company valuation to arrive at a simple formula for filtering out anticipated litigation loss from securities damages.

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I. INTRODUCTION

The judicial adoption of economic assumptions arguably achieved an apex in the area of securities litigation. The availability of class action relief for securities fraud rests almost entirely upon the judicial endorsement of an abstract ideal of market efficiency adopted from

1. While the influence of economic theory has been widespread throughout legal subjects, often associated with the law and economics school of jurisprudence, rarely, if ever, has an economic theory of such new and untested development assumed such a central role in judicial usage as that of the efficient markets hypothesis. The efficient markets hypothesis "was accepted by a federal court within five years of its academic delineation. In another thirteen years it became a presumption for plaintiffs in shareholder class actions in most circuits and was so adopted by the Supreme Court in Basic v. Levinson . . . . Ironically, the lack of correlation between speed of adoption and professional acceptance is shown by the efficient market hypothesis example. At the time of its endorsement by the Basic Court’s majority, economists were beginning to find anomalies in securities prices that appeared to be inconsistent with the logical implications of the efficient market hypothesis." Frederick C. Dunbar and Dana Heller, Fraud on the Market Meets Behavioral Finance, 31 Del. J. Corp. L. 455, 457 (2006).
theories of economics and finance. The adopted theory is that of the Efficient Capital Markets Hypothesis ("ECMH"), which holds that in modern developed markets all information of value is automatically incorporated into a security's price. The unique circumstance of the Supreme Court of the United States endorsing an abstract theory of economic finance, under the given legal label of "fraud on the market," has likely more to do with procedural necessity than the descriptive force of the theory. For fraud on the market circumvents, conveniently, the reliance obstacle to establishing a common cause of class action pleadings, and allows a class of investors to claim misrepresentation without each having to show actual reliance. A near impossibility of showing common reliance within the infinitely varied entry into the stock market is averted with an ideal vision of efficiency – as each is held to have relied upon the market itself, not upon disparate pieces and conveyances of information that make up the market.

When a market is assumed to be perfectly efficient, misinformation is deemed to defraud investors who have relied upon the integrity of the market as information is at once in instantly incorporated into price. Such a presumption of market efficiency appears an aspira-

2. See Basic Inc. v. Levinson, 485 U.S. 224, 242 (1988); Wherein Justice Blackmun, writing for the majority, stated: "Requiring proof of individualized reliance from each member of the proposed plaintiff class effectively would have prevented respondents from proceeding with a class action, since individual issues then would have overwhelmed the common ones." See also Dunbar and Heller, supra note 1, at 457.

3. For a definition of the ECMH, see Carol R. Goforth, The Efficient Capital Market Hypothesis – An Inadequate Justification for the Fraud-on-the-Market Presumption, 27 WAKE FOREST L. REV. 895, 896 (1992): "The ECMH generally posits that the pricing mechanisms of organized capital markets efficiently incorporate information; or, in other words, the prices of securities traded in such markets always reflect all available information." For a discussion on the ECMH and its origins, see Burton G. Malkiel, A RANDOM WALK DOWN WALL STREET (4th ed. 1985); Richard A. Brealey, AN INTRODUCTION TO RISK AND RETURN FROM COMMONSTOCKS (2d ed. 1983); Edwin J. Elton & Martin J. Gruber, MODERN PORTFOLIO THEORY AND INVESTMENT ANALYSIS (2d ed. 1984); Eugene F. Fama, FOUNDATIONS OF Finance (1976); William F. Sharpe, INVESTMENTS (3d ed. 1985); Eugene F. Fama, EfFICIENT CAPITAL MARKETS: A REVIEW OF Theory AND Empirical Work, 25 J. Fin. 383 (1970); Dunbar and Heller, supra note 1, at 462.

4. Basic, 485 U.S. at 242. See also Goforth, supra note 3, at 895.

5. See Dunbar and Heller, supra note 1, at 457.

6. The Federal Rule of Civil Procedure 23(a) states: One or more members of a class may sue or be sued as representative parties on behalf of all members only if: (1) the class is so numerous that joinder of all members is impracticable; (2) there are questions of law or fact common to the class; (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class; and (4) the representative parties will fairly and adequately protect the interests of the class. Fed. R. Civ. P. 23(a). When combined with the reliance requirement of securities fraud litigation under Rule 10b-5 (as promulgated under the Securities Exchange Act of 1934, 17 C.F.R. § 240 (2005)), the requirement of commonality for class action certification would become nearly insurmountable. See Basic, 485 U.S. at 242.

7. See Dunbar and Heller, supra note 1, at 461-62 (discussing the difficulties of showing common reliance in share purchases).
tional device; for placing the costs of rebuttal upon a company's management, to show that reliance did not occur, is said to encourage market transparency and the very same integrity of information that is assumed theoretically. What is presumed procedurally and theoretically is to be encouraged systemically.

While procedural gains perhaps have been achieved through the judicial adoption of market efficiency assumptions, supposedly furthering incentives for management transparency, it also appears that procedure has limited the logical treatment, extension of the efficiency assumption to the entire range of a fraudulent claim. Obscured is the extent to which the economic assumptions of fraud on the market should also and necessarily extend to the amount of damages claimed. While a wealth of judicial and academic attention has been paid to the initial procedural stages of securities fraud, such as reliance, materiality, and loss causation, less attention has been paid to the question of assessing the quantum of damages sought; of loss outright and in conclusion.

For the soundness of market information to be encouraged through the litigation presumption of information efficiency, the effect should not become counter-distorting through an over-compensation in damage award. Although a subsequent, post misrepresentation fall


in share price traditionally has been the basis of loss claims, the result is that a class of investors is able to recover on an amount that also includes the market's anticipated cost of its future litigation. The following Article proposes a method for discounting anticipated litigation claims to make for a more accurate reflection of defrauded investor loss. The supplied method is comprised of two simple steps. First, an intrinsic measure of a company's value is selected, such as discounted future cash flow, to provide a mirror valuation with which to contrast against share price. The anticipated loss from a misrepresentation's disclosure, or the lessened future expectations of the company, is then compared along both the share and intrinsic values.

The second step involves running the intrinsic value to also account for the total class action damage claim. This retroactive inclusion is supported by the same rational assumption of the efficient market hypothesis that is used to justify the class action certification itself. If the efficient markets assumption is to be applied with consistent logic, then one must assume that the instant a misrepresentation is made public that rational investors will automatically discount the stock price to account for the inevitable class action suit that will arise. This perfect market assumption would be mirrored in the intrinsic value measure through an additional, secondary diminishment of expected company earnings.

If the purchaser anticipates a future litigation claim by a share's seller against the company asset, as the ideal of efficiency and rationality require, the result is that such anticipated litigation is discounted from the purchase price in an estimated value. A straightforward damage assessment of inflated purchase price minus sale price would allow for the wronged seller to gain a monetary award that is based upon both his or her depreciated asset and the anticipation of his or her judicial claim. The wronged seller's recovery, in this scenario, would include a double accounting of fall in price due to both diminished company expectations and the cost to company of compensating for the same wrong through future litigation.

The secondary loss including damage claim thus becomes an additional portion, or ratio, to be compared with the initial misrepresentation loss. The ratio of litigation to misrepresentation loss may then be incorporated into the mirror measure of share price to arrive at the estimation of a rational investor's price discount for litigation loss. Any damage award must logically account for this rational discounting on the part of the post disclosure, entering share purchaser, who

notably sets the figure of misrepresentation loss. In short, the assumption of market efficiency means that any subsequent loss claim would have been, indeed must have been, predicted by the rational purchaser who is buying the share after disclosure.

Advancing the policy goal of market transparency through the assumption of market efficiency should be joined with an accurate accounting of harm, and the avoidance of a double compensation that acts as a form of investment insurance — or even windfall — for one group of investor at the expense of another.

Part one of this Article begins with a discussion on the unique nature of fraud in the context of securities litigation. The traditional components of fraud at common law are contrasted with the disconnected and impersonal transactions of a securities market that would render class action proceedings implausible. The judicial innovation of fraud on the market is the solution to this procedural obstacle of impersonal transactions, and the theory and its policy justification is accordingly given a brief overview. A further and under-analyzed aspect of securities fraud uniqueness is the multi-dimensional nature of the individuals involved in a claimed misrepresentation, including the dislocation between the misrepresenting party, the party who gains, who assesses the price of loss, and who suffers the loss. The multidimensional roles inherent to securities fraud, and the role of the assessor purchaser in particular, inform the theory of discounted litigation loss argued for by this Article.

The second part of the Article examines the remaining major elements of securities fraud, materiality and loss. Two main approaches to materiality may be identified, that of intuition and intrinsic measurement. While the intuitive approach may be said to look for an obvious connection in time between a management announced falsehood and the claimant’s purchase, the intrinsic looks to independent and alternative measures of company value to determine whether the claimed misrepresentation is information that would be impactful upon the company’s future expectations. The remaining element of loss is addressed in relation to assumption of “out of pocket loss” which continues to define the judicial treatment of securities fraud damages. This simple rise minus fall calculation of misrepresentation's cost is a flawed prospect whose replacement is contemplated in the third and most significant portion of the Article.

The third part of the Article begins with a challenge to the logical possibility of straightforward out of pocket loss by considering the

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vantage of the post misrepresentation purchaser. After arguing for the logical necessity of a litigation price discount, elements from the previous materiality discussion will be used to reform the picture of loss. Intrinsic measures of company value will provide for a ratio of discounted litigation loss with which to temper the status quo tendency toward investor overcompensation and insurance.

II. UNIQUENESS AND PROCEDURAL PROBLEMS

Fraud at common law is normally comprised of the following: a misrepresentation – the falsehood; scienter – a wrongful mind on the part of the communicator; reliance – if not for the falsehood, the wronged would not have entered into the transaction or deal; loss causation – the falsehood is the probable, proximate cause of the loss claimed by the wronged party.\footnote{13} The elements of common law fraud may also be expressed in a more straightforward fashion: A falsehood is authored to mislead another, who suffers through his or her belief.

Fraud within the securities context is unique in two significant ways. First, the securities context does not involve a one-to-one relationship between inducer and duped.\footnote{14} The secondary market of a securities sale is a complicated instance of resale, in which A purchases X from B, while the qualifying information about X is given by C (the

\footnote{13} As noted by Richard Posner: "what securities lawyers call 'loss causation' is the standard common law fraud rule . . . merely borrowed for use in federal securities fraud cases." Bastian v. Petren Res. Corp., 892 F.2d 680, 683 (7th Cir. 1990)(citations and emphasis omitted.) See also Dunbar and Heller, supra note 1, at 458 (noting the connection with the common law of deceit and defining the following ingredients: "This required showing, among other things, the following: (1) materiality—whether the misstatement or omission was important to a reasonable investor; (2) scienter—whether defendants acted with some degree of intent; (3) reliance—whether the investor's decision to trade was affected by the omission or misstatement (also sometimes called transaction causation); and (4) loss causation—whether the misstatement or omission was the proximate cause of the loss to the investor."). See also Barbara Black, Fraud on the Market: A Criticism of Dispensing with Reliance Requirements in Certain Open Market Transactions, 62 N.C. L. Rev. 435, 439 (1984); Greenwald v. Integrated Energy, Inc., 102 F.R.D. 65, 68 (S.D. Tex. 1984).

\footnote{14} As the court in Basic noted: "The modern securities markets, literally involving millions of shares changing hands daily, differ from the face-to-face transactions contemplated by early fraud cases, and our understanding of Rule 10b-5's reliance requirement must encompass these differences." Basic, 485 U.S. at 243-44. And further, the court in Basic endorsed the following from In re LTV Securities Litigation, 88 F.R.D. 134, 143 (N.D. Tex. 1980):

"In face-to-face transactions, the inquiry into an investor's reliance upon information is into the subjective pricing of that information by that investor. With the presence of a market, the market is interposed between 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."
company management). The dislocation of A, the wronged purchaser, is further increased by the layers of purchase, such as a stockbroker, that further separate out the chance of a personal or human exchange. A disconnection between parties characterizes such secondary market transactions: for there is no direct or personal connection between the party who makes the complained of misrepresentation, the party who sells the security, and the party who buys the security.

Second, the nature of loss assessment amplifies the uniqueness of fraud within the securities context. Beyond the disconnected relationships mentioned above - of company, seller, and purchaser - there is the needed introduction of an all important second purchaser who sets the price of the security's loss point. A view to damage outcomes is essential to a complete and logical picture of the resultant loss flowing from the complained of misrepresentation. While a loss is caused by a misrepresentation authored by a company's management, it is the entry of a post-disclosure purchaser that sets the quantum of loss claim. Accordingly, if the disclosure of a misrepresentation reveals that the purchase price was inflated due to fraud, the point of comparison that determines the amount of loss due to the fraud is normally the sale price.

Unlike a painting sale encouraged by fraud, in which a dealer knowingly indicates that the purchased piece is the work of a master rather than that of a skilled forger, the securities market involves a continuing view of future expectation that includes all three parties of communicator, wronged seller, and post-misrepresentation purchaser. The post-misrepresentation purchaser in the case of the painting buys a work he or she knows to be forged, with this realization no doubt affecting a greatly reduced purchase price in a one time discounting of the disappointing authorship.

In the case of the security, however, the post-misrepresentation purchaser must be aware that his or her new asset will in the future be dependent upon the past relationship between the communicator and the seller involved in the fraud. Whereas the deflated painting remains simply that, a devalued work of art and investment, the security asset is based upon expectations of the company itself – it remains a constant reflection of the markets valuation of the company's performance relative to others. Therefore, unlike the painting pur-

15. For examples of securities fraud situations, see Daniel R. Fischel, Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities, 38 BUS. LAW. 1 (1982); Eisenhofer, supra note 10, at 1419-20; Cornell, supra note 10, at 889-95; Fox, supra note 11, at 521-22.

16. Logically this must be the case as out of pocket is dependent upon the sale point – which is of course set by the purchaser.

17. See supra note 13.
chaser who may ignore any fraud claims of the seller against the vendor because it will no longer affect the value of painting, the security purchaser must anticipate that his or her new asset will be contingent upon, among other things, the seller's future and likely costly action against the company. In this regard, the security is at once an independent asset transferred between seller and purchaser, and also an asset dependent upon the performance of the underlying company which is subject to litigation loss at the hands of the seller.

To make the painting example of traditional fraud approximate to a securities transaction would require that the seller be able to extract some value from the painting's worth post transaction. The contract of sale for such an odd circumstance would need to include a stipulation that if the seller is able to win a lawsuit from the initial vendor, the purchaser would subsequently surrender a portion of the painting back to the seller. While such a contract is overly vague and contingent, the nature of the transaction would at least indicate that the purchaser must take into consideration far more than the present value of the painting. The point of comparison is that in the securities context; the post-misrepresentation must rationally be aware of both the preceding diminishment of the asset through fraud, and the coming legal consequences that will flow from it to affect the asset they are buying. Securities fraud requires uninvolved and entering purchasers to straddle between the past events of the fraud's diminishment and the future costs of legal proceedings.

As a security is a reflection of future expectations on relative company performance, the post-misrepresentation purchaser should account rationally for all the economic prospects of the company, including the coming lawsuit from the wronged seller that will no doubt affect future profitability. As a security is a continuing reflection of company prospects, the context is unique in that an anticipated lawsuit for fraud is rendered a direct calculation in setting the same purchase price that will be used as the basis for loss in the lawsuit itself. The nature of this intricate addition to post-fraud valuation should inform all thoughts on loss and compensation as it invariably informed the purchaser's role in crystallizing the claimed for loss.

The above two components of securities uniqueness, of initial and post damages, provide for a useful conceptual ordering to this Article; as the concerns of the first represent the law's previous absorption, the second its needed improvement.
III. RELIANCE

The Securities Exchange Act of 1934\textsuperscript{18} established unlawful deceit for the securities context, which establishment courts then held to extend to support private causes of action, first in the \textit{Kardon v. National Gypsum Company}\textsuperscript{19} decision.\textsuperscript{20} The judicial fraud on the market approach to securities misrepresentation developed in response to the subject specific difficulties of establishing reliance for class actions. Reliance has traditionally been defined in terms of a common law standard of "but for" reasoning.\textsuperscript{21} Simply, "but for" the misrepresentation of the defrauding party, the wronged party would not have entered into the complained of transaction. Increased difficulties in satisfying the reliance requirement occur because of the unique nature of a disconnected purchase within the securities market mentioned above. With no direct relationship of individual contact or communication between the communicator of the supposed misrepresentation, the company's management, the claimant is operating on public information that is not specific to his or herself.\textsuperscript{22} With no specific promise to mark reliance, it must seemingly be inferred from a purchase proximate to a public communication that would reasonably instigate an investor into the market for the company's shares.

A greater difficulty in establishing reliance existed in the securities context as a result of the procedural necessities of class action proceedings, namely the rules requiring a common basis of factual pleadings.\textsuperscript{23} When combined with the disconnected nature of a securities transaction, the additional requirement of a common factual cause was tantamount to impossibility for class action certification.\textsuperscript{24} As each individual investor is necessarily responding to public information, how he or she does so will remain varied and open to different

\begin{itemize}
  \item \textsuperscript{18} 17 C.F.R. § 240 (2005).
  \item \textsuperscript{19} 73 F. Supp. 798 (E.D. Pa. 1947).
  \item \textsuperscript{20} \textit{Id.}; see also Michael Duffy, \textit{'Fraud on the Market': Judicial Approaches to Causation and Loss From Securities Nondisclosure in the United States, Canada and Australia}, 29 MELB. U. L. REV. 621, 623-24 (2005).
  \item \textsuperscript{21} See Fox, supra note 11, at 511.
  \item \textsuperscript{22} That is, the company did not make a promise to any party directly.
  \item \textsuperscript{23} \textit{Fed. R. Civ. P. 23(a).} One or more members of a class may sue or be sued as representative parties on behalf of all members only if (1) the class is so numerous that joinder of all members is impracticable, (2) there are questions of law or fact common to the class, (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class, and (4) the representative parties will fairly and adequately protect the interests of the class. See also Dunbar and Heller, supra note 1, at 461.
  \item \textsuperscript{24} "Requiring a plaintiff to show a speculative state of facts, i. e., how he would have acted if omitted material information had been disclosed, or if the misrepresentation had not been made, would place an unnecessarily unrealistic evidentiary burden on the Rule 10b-5 plaintiff who has traded on an impersonal market." Basic, 485 U.S. at 245 (citatations omitted).
\end{itemize}
instances of response. There is no singular response, in style and sub-
stance, to a communication made to the public at large, as opposed to
a promise to a specified individual or group.\textsuperscript{25}

The solution to the disconnected transaction impediment found
its inspiration in a theory of economics and finance, the Efficient Capital Markets Hypothesis ("ECMH").\textsuperscript{26} The ECMH holds generally that
in modern and highly developed securities markets, all information of
value regarding a company is instantaneously incorporated into its
share price.\textsuperscript{27} The direct influence of the ECMH on judicial usage,
under the label of fraud on the market, may be discerned from the
following statement from \textit{Basic Inc. v. Levinson},\textsuperscript{28} in which the court
endorsed:

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 in-
formation regarding the company and its business. . . . Mis-
leading statements will therefore defraud purchasers of stock
even if the purchasers do not directly rely on the misstate-
ments. . . . 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.\textsuperscript{29}

The judicial adoption of the ECMH represents an embrace of the
ideal of economic efficiency for the sake of circumventing the obstacle
of reliance.\textsuperscript{30} This circumvention is achieved by altering the standard
focus of information from specific circumstances to the general of the
market itself. From an assumption of an ideal market efficiency came
the court-developed notion of fraud or misrepresentation as a corrup-
tion of the integrity of the market itself. The specific requirements of
fraud as communicated between individuals is thus exchanged for a
concept of fraud that is orchestrated upon the market, upon which all

\textsuperscript{25} See Dunbar and Heller, supra note 1, at 461-62.

\textsuperscript{26} See discussion and notes under supra note 3.

\textsuperscript{27} "A market is said to be fundamentally efficient if it correctly impounds all pub-
licly available information so that the price of the security matches an objective mea-
sure of value." Dunbar and Heller, supra note 1, at 473. See also Ronald J. Gilson &
Reinier Kraakman, \textit{The Mechanisms of Market Efficiency Twenty Years Later: The
Hindsight Bias} (Columbia Law and Economic Working Paper No. 240, 2003), and (Stan-

\textsuperscript{28} 485 U.S. 224 (1988).

\textsuperscript{29} \textit{Basic}, 485 U.S. at 241-42 (quoting Peil v. Speiser, 806 F.2d 1154, 1160-61 (3d Cir. 1986)).

\textsuperscript{30} "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." \textit{Basic}, 485 U.S. at 245. See also Dunbar and Heller, supra note
1, at 465; Goforth, supra note 3, at 911.
investors are assumed to rely equally regardless of individual decision-making.

Under the ECMH, information of economic value is assumed to be incorporated automatically into share price, and all investors are taken to act, or invest, in reliance upon transparent markets regardless of specific aspects of communication. Investing thus becomes the act of reliance, which is protected by a judicial presumption that market price reflects all available information. By purchasing shares in a securities market, the investor is taken to have relied upon the soundness of all the relevant information that has been used by others, the market, to arrive at the given purchase price, even though he or she might have been ignorant of the specific information later complained by the class as fraudulent. Under fraud on the market, the decision to purchase a share equates to blanket reliance upon all information offered by management that reasonably informed the market price of that share.

IV. MARKET EFFICIENCY AND PUBLIC POLICY

Permitting for litigation relief premised upon an ideal of market efficiency in the incorporation of information may be seen as an aspirational judicial concept: namely, what is assumed to be — market transparency and efficiency — is used to justify the court's procedure for encouraging what it deems ought to be — market transparency and efficiency. The logic may be seen to follow the lines of: (1) market transparency is assumed; (2) so that all relevant management information is taken to be relied upon by investors regardless of individual knowledge, and; (3) therefore, there is a greater incentive for management, in light of the greater availability of investor claims, to encourage the very same market transparency which is assumed. The aspirational quality of the market assumption is explicitly delivered in Basic Inc. v. Levinson: "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 aspirational, as opposed to descriptive, nature of fraud on the market is most discernible in the unreality of the assumption of market efficiency. Most notably, if markets were truly and ideally efficient in the incorporation of information there would be no incentive

31. See Dunbar and Heller, supra note 1, at 465; see also supra note 28.
33. Supra note 28.
34. Meaning that the theory is not an accurate reflection, nor even its attempt, to portray actual market and investment behavior.
to invest in the securities market at all. The sentiment against the ideal of perfect securities markets is put pithily by the famous investor Warren Buffet: "I'd be a bum on the street with a tin cup if the markets were efficient."35

Basically, if all relevant information is incorporated instantaneously into share price there would be no incentive to invest — no advantage could be had in realizing an economic insight before others, as the market would eliminate such insight through instantaneous incorporation of all pertinent information.36 Nor does the hypothesis explain the dramatic stock market crashes, or runs of bad news, apparently unsubstantiated by all incorporated information.37

Again, the aims of market transparency, and investor faith in this transparency, is supported by the procedural device of fraud on the market that places the costs of disproving reliance, as well as loss causation, upon the company.38 Importantly, however, the procedural and systemic gains available under fraud on the market are not without a serious potential cost. Justice White's dissent in the Basic decision is particularly notable for its adamant caution on the potential danger of investor insurance: "[A]llowing recovery in the face of 'affirmative evidence of nonreliance'—would effectively convert Rule 10b-5 into 'a scheme of investor's insurance.' There is no support in the Securities Exchange Act, the Rule, or our cases for such a result."39 The concern that one group of investors may inappropriately insure or compensate another is echoed in the majority decision in the Dura v. Pharmaceuticals, Inc. v. Broudo40 decision.

Significant in Justice White's caution is the recognition of different classes of investors, as those investors who are claiming the wrong will achieve their compensation from the remaining shareholders.41 It is not from the authors of a misrepresentation, the company's management, that the defrauded will receive the bulk of their compensation, but rather from other shareholders, who either held the security

35. Times Online: http://business.timesonline.co.uk/tol/business/industry_sectors/banking_and_finance/article4821506.ece (Last Visited Jan. 22, 2010).
36. On market irrationality in general, see Dunbar and Heller, supra note 1, at 471.
37. Goforth, supra note 3, at 903.
38. On rebuttal presumption, see id. at 913-14.
41. "And who will pay the judgments won in such actions? I suspect that all too often the majority's rule will 'lead to large judgments, payable in the last analysis by innocent investors, for the benefit of speculators and their lawyers.'" Basic, 485 U.S. at 262 (White, J., dissenting). See also John C. Coffee Jr., Causation by Presumption? Why the Supreme Court Should Reject Phantom Losses and Reverse Broudo, 60 Bus. Law. 533, 534 (2005).
during the misrepresentation rise and fall, or who came into ownership after the disclosure. Most notably, those who have received the ill-gotten gains resulting from the fraud are third party investors long gone and are in no way accountable to those who purchased their shares.\textsuperscript{42} Those individuals who most benefited from the wrong of management are likely investors who happened to sell at the most opportune point within the window of misrepresentation. These fortunate or favored investors' gain is in no way open to judicial consideration, much less return, to the duped purchaser.

Although covered by the assumption of market efficiency, the decision to purchase within the window of misrepresentation may have only been luck – without the requirement of actual reliance the purchase itself denotes a thinly informed decision, if informed at all. In sum, the defrauded investor is compensated in large part (apart from entering purchasers)\textsuperscript{43} by the remaining and continuing owners of the company who realized only loss on the fraud through the diminished value of their investment, while those who capitalized on the fraud, by selling to the defrauded (or even gullible), are not involved in any compensation claim.

V. RECOGNIZING RELIANCE & LOSS

In Basic Inc. v. Levinson,\textsuperscript{44} Justice White's vigorous dissent against the fraud on the market assumption addressed implications willfully avoided by the majority, namely the issue of damages. Yet, despite the majority's explicit avoidance, fraud on the market raised difficult questions throughout the process of securities litigation for fraud. Apart from reliance, the remaining major elements of fraud in the securities context are materiality and loss causation.\textsuperscript{45}

\textsuperscript{42} John C. Coffee Jr., Causation by Presumption? Why the Supreme Court Should Reject Phantom Losses and Reverse Broudo, 60 Bus. Law. 534 (2005); Dunbar and Heller, supra note 1, at 526: (“Ideally, under the '33 Act the punishment would be paid by the original owners of a corporation who received the excess proceeds. If the corporation itself makes the payment, however, then the payors are all the shareholders. This problem is compounded in the case of a claim under the '34 Act, where there is essentially no thought of making the primary beneficiaries of the fraud (investors who generally unknowingly sold at inflated prices) return their gains to benefit those harmed by the fraud.”).

\textsuperscript{43} Though entering purchasers set the value post disclosure, they join continuing shareholders who might have purchased before the false disclosure bubble, see Figure 1 \textit{infra}, who may make up the bulk of investors whose interests in the company will be most affected by the coming lawsuit from defrauded purchasers.

\textsuperscript{44} 485 U.S. 224 (1988).

\textsuperscript{45} In the securities context, materiality is used interchangeably with the term transaction causation. See Fox, supra note 11, at 516 (using the language of transaction causation); Goforth, supra note 3, at 937 (using materiality).
As materiality addresses the significance of the misrepresentation as a basis for reasonable reliance, loss causation requires that the misrepresentation remain the substantial explanation for the loss claimed by the wronged party. Materiality is essentially a question of importance. Materiality questions not whether a communication was relied upon, but if it was relied upon reasonably. Materiality is an entry question, of an objective nature, addressing whether a reasonable person or investor similarly situated would have deemed the same information important enough to act upon. While materiality is an important theoretical requirement for recovery, it has received less and less judicial attention over time. The reason is that materiality can be presumed when a misrepresentation is followed closely by a price rise since it indicates that other investors have thought the information material enough to increase the stock valuation. This intuitive acknowledgement of materiality, though often unspoken, connects with an underlying difficulty in securities litigation that questions how far the assumption of efficiency is to be carried without specific evidentiary requirements.

The component of loss causation reflects the contested efficiency assumption; for unlike materiality, loss causation has received substantial judicial consideration, and the result was a divided approach. While one set of appellate decisions hold that loss causation could be assumed along with materiality if there is a price inflation, and thus may be said to follow the efficiency assumption completely, another set of appellate level decisions have held that loss causation must be shown in addition to inflation so that loss causation creates a separate post misrepresentation filter that scrutinizes the subsequent fall as well. It has been argued that the seeming deep divide over loss causation is merely procedural as there is the potential that other post misrepresentation explanations for loss may be addressed at the point of final damage assessment. However, this procedural potential is more theoretical than realized, for the overwhelming bulk of cases settle upon class action certification and never proceed to the damages award stage. Given this proclivity, the efficiency assumption may be decisive without examination of competing events that detract from the blanket of market integrity. This, of course, may further distort the policy justification of fraud on the market toward overcompensation.

46. See Dunbar and Heller, supra note 1, at 467.
47. Id.
48. See discussion and case references in Eisenhofer, supra note 10 1431-37.
49. Fox, supra note 11 at 519, 520.
50. Coffee, supra note 42 at 539-40.
The Supreme Court of the United States recently resolved the di-
vide over the treatment of loss causation between assumption and ex-
amination in *Dura v. Pharmaceuticals, Inc. v. Broudo*,51 which
favored the requirement of post misrepresentation connection to loss
at the first instance and not simply the nearly never stage of damages.
In the *Dura* case, the defendant drug company issued misleading
statements regarding both its future profitability expectations on the
basis of drug sales, and on the likely Federal Drug Administration
(“FDA”) approval for an asthmatic spray device being developed by the
company.52 At issue was a narrow procedural question on whether
the requirement of loss causation may be satisfied by purchasing a
share inflated by misrepresentation.

The United States Court of Appeals for the Ninth Circuit, in a
finding consistent with its own longstanding precedents,53 held that
an inflated purchase alone was sufficient to qualify as loss causation.
The result of this approach is to base the class action certification and
crystallize the reference for damage assessment as the point of in-
flated purchase without regard to later events, namely the fraud “dis-
closure and subsequent drop”54 in share price. Again, this carries
fraud on the market, and market assumptions, to a dominant position
procedurally, especially in light of the great propensity of settlement
post certification, and certainly before final damage determination.
To glean the weight of the market assumption in such an approach,
consider that the *Dura* plaintiffs’ pleadings claimed only that “in reli-
ance on the integrity of the market, [the plaintiffs] ... paid artificially
inflated prices for *Dura* securities.”55

The Supreme Court reversed the Ninth Circuit and held that the
plaintiffs’ pleadings did not establish a minimum connection between
the misrepresentation and the loss complained by way of proximate
causation.56 The Court’s reasons, delivered by Justice Breyer, noted a
key logical difficulty attendant to the slivered treatment of fraudulent
elements in which fraud on the market also satisfies loss causation
through the same inflationary evaluation for reliance. As Justice
Breyer, writing for the majority, observed, “as a matter of pure logic,
at the moment the transaction takes place, the plaintiff has suffered

52. *Dura*, 544 U.S. at 339. See also Fox, supra note 11, at 530; Patrick J. Coughlin,
et al., *What’s Brewing in Dura v. Broudo? The Plaintiffs’ Attorneys Review the Supreme
Court’s Opinion and Its Import for Securities-Fraud Litigation*, 37 Loy. U. Chi. L.J. 1,
10 (2005) (providing an in-depth coverage of the facts of the suit).
53. See Coughlin, supra note 44, at 1.
55. *Dura*, 544 U.S. at 340.
56. *Id.* at 346-48.
no loss; the inflated purchase payment is offset by ownership of a share that at that instant possesses equivalent value."

Professor Coffee has termed the loss occurring immediately upon the inflated purchase a "phantom loss." Such losses are potential, or contingent only. It is not simply that such are paper losses awaiting realization, but that a loss may never arise at all. Significantly, the share could be sold at a still higher inflated price, before disclosure and within the initial rise. In this case the misrepresentation would not have caused any loss at all. Similarly, time may eventually diminish the impact of the misrepresentation's realization, or other negative matters might overwhelm the misrepresentation as the proximate, likely explanation of loss. In such cases, the claimed misrepresentation would not meet the causal requirement.

In *Dura*, the Supreme Court delivered a uniform treatment of loss causation, clarifying that a separate specification of causation is indeed necessary apart from market assumptions, and has thereby given further clarification to the core elements of securities fraud in the initial procedural setting. The purpose of this Article, however, is to follow Justice White's concern for damage calculations to completion, and provide for a further rational filter for assessing securities fraud. Accordingly, the following section provides an overview of different styles of examining stock behavior. This overview will yield the tools for discounting litigation loss from damages to occur in the final section.

VI. FILTERING LOSS

The conceptual division between stock rise and fall analysis provides for a useful arrangement for considering different filtering means; and this analysis may be further divided between intuitive views of rise and fall, and mirror measures of share price that rest upon underlying economic and market indicators. Although an intuitive view may be used similarly to contemplate an entire range of stock activity of rise, stability and fall; the mirror measures may be distinguished as either intrinsic or extrinsic, and which correspond to a choice between a rise or fall focus.

Intrinsic measures evaluate company specific information to determine whether the promised information of a misrepresentation does add to, and thereby inflate, a company's future profit expecta-

57. *Dura*, 544 U.S. at 342.
58. Coffee, supra note 42 at 533.
59. Id.
60. The *Basic* decision notably avoided the issue of damages, as White's dissent observed. See also Goforth, supra note 3, at 916.
tions. This type of analysis may be seen to validate the movement of the market after a company announcement, in that the move reflects an economically justified change in assessment of the company based upon prospects or assets. An extrinsic measure, on the other hand, looks beyond the company to question whether a share rise or fall might not be better explained by another, more significant event. An appreciation of these mirror measures may allow for a more accurate reading of both the initial step of establishing a misrepresentation loss and the second substantial step of assessing the quantum of the misrepresentation's resultant loss.

A. THE INTUITIVE RISE

An intuitive approach is readily available without complex comparative economic evaluation. The intuitive approach is perhaps demonstrated most readily with a visual representation of a security's behavior; intuitively, if you will. Consider the below chart, Figure 1, which is a stylized representation of share price activity during the time surrounding a company's announcement that is later claimed to be fraudulent. Addressing the question of materiality, of whether a public announcement (apart from the question of its validity) impacted the security asset, may simply be a matter of viewing the near-term share activity following the announcement.

Figure 1:
In the example of Figure 1, a steep incline in price exists following the announcement, assuming the time interval between the statement (M) and the peak price point (located around the time point of 4) is relatively short, such as one day. The time until disclosure of the accurate information, and by it an acknowledgement of the past misrepresentation (D), may be of varying length, and below the short and hypothetical period between 4.5 and 5 (at point D). The immediate upturn in price upon the heels of a misrepresentation, and in the absence of other notable occurrences near in time, may serve to identify a cause and effect, again in intuitive sense based upon appearance alone. Given the unpredictable and personal nature of investment decisions, with share price movements motivated by various groups and types of investors of varying sophistication, perhaps such an intuitive appreciation best reflects the market itself.

B. THE INTRINSIC RISE

The purpose of identifying a separate and mirroring valuation of the company to compare alongside that of market value is to achieve a more objective means of identifying material changes in value wrought by public disclosure. For instance, if a company announcement states that a new product line will produce X in profits, the material importance of such a statement may be verified by analyzing the actual input of the new product into the company’s profit expectations, via a Discounted Cash Flow Analysis (“DCFA”), for example. Although a DCFA is an influential economic measure of company valuation, the purpose here is to identify the potential and importance of mirror measures of company valuation, not to identify the measure. No single calculation or economic evaluation need be the sole means of comparison, as many economic evaluation methods may serve. For instance, another and alternative intrinsic mirror measure could be found in that of Earnings Per Share (“EPS”), a common value in stock market analysis, which similarly points to underlying company fundamental in comparison to market reaction. If the EPS figure were, for example, to rise in reaction to a company announcement then it would reflect improved future prospects. However, if the share price was to rise independent of movement in EPS, then one could question the rationality of the market in response to the company statement (recal-

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61. On sophisticated investors as conduits for information, see Dunbar and Heller, supra note 1, at 472 (“[P]rices fully reflect all known information, and even uninformed investors buying a diversified portfolio at the tableau of prices given by the market will obtain a rate of return as generous as that achieved by experts.” (quoting Burton G. Malkiel, The Efficient Market Hypothesis and Its Critics, 17 J. ECON. PERSP. 59 (2003))).

ling the rational efficiency assumption), and through it question the materiality of the claimed reliance upon the company communication.

Again, the simple objective is to locate a mirror measure, in a trusted economic tool of assessment, with which to contrast economic fundamentals with market activity. The ideal of such a mirror measure may be demonstrated visually, alongside of the stylized market movements represented above that may also serve as the material for an intuitive assessment. Such a visual representation follows in Figure 2:

Figure 2:

The mirror measure is found in the more distinct cut line below the bell curve like representation of share price trading, with the more stable lines representing the relative constants of company expectations; stable until revised or altered by a subsequent development. Unlike the myriad trades that may occur in ever fluctuating impressions of company valuation, the actual economic projections of a company remain the same over a relatively longer period of time, such as quarters versus seconds.

In the stylized example presented, the company announcement is of economic significance, and therefore legally material, as it causes estimations of future company performance to rise. In keeping with the simplicity of materiality, it would have made sense for the supposed rational investor to act upon the information of enticement pro-
vided by the company; or that it did rationally become an enticement. Notably, though, the ratio of rise between the market and the mirror is not equal, nor is it likely to be. Given the usual inflation of the market price over economic fundamentals (and hence such market quotients as price divided by earnings per share), it follows that the latest information increase should also be reacted to with greater market exuberance than explained by a rational economic analysis alone. Simply, if the market is trading at twenty-five percent above a calculation of underlying economic value due to each share, then it follows that an additional and evaluated piece of information will rise twenty-five percent greater than the rise of the mirror measure. Of important note, this element of market exuberance, or of general inflation of investing spirit above rational economic assessment, should be remarked upon and accounted for in a concluding judicial consideration of a securities class action claim.\footnote{Dunbar and Heller, \textit{supra} note 1, at 513: “One of the expected characteristics of a stock with a bubble component will be a crash in the price out of proportion to the news that is the precipitating event. Traditionally, plaintiffs use such a price decline as a measure of the inflation per share during the class period. Because the price decline is not related to the true value of the news, however, such an analysis leads to an overestimate of damages. This, then, creates the additional problem of how damages can be measured in the presence of market inefficiencies.”}

C. \textsc{The Extrinsic Fall}

An operative note of extrinsic mirror measures is the evaluation of surrounding events, under the label and technique of event studies, which seek to correlate a singular event, such as a fraudulent company announcement, with the surrounding environment of impact so as to discern the weight of the singular event upon the subsequent behavior of the stock studied.\footnote{For event studies in general, see Mark L. Mitchell and Jeffry M. Netter, \textit{The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission}, 49 Bus. Law. 545, 546, 556-58 (1994); Eisenhofer, \textit{supra} note 10, at 1424-28; Dunbar and Heller, \textit{supra} note 1, at 468; For other discussions concerning the implications of advances in behavioral finance, see Donald C. Langevoort, \textit{Taming the Animal Spirits of the Stock Markets: A Behavioral Approach to Securities Regulation}, 97 Nw. U. L. Rev. 135 (2002); Lynn A. Stout, \textit{The Mechanisms of Market Inefficiency: An Introduction to the New Finance}, 28 J. Corp. L. 635 (2003).} Further, though an event studies analysis involves a complex set of relationships and sophisticated data analysis, of an ambition that will not be attempted here, the effect of such studies is testing the isolation and impact of the single announcement. An event study analysis may simply indicate that there is a better explanation for a wronged shareholder's loss of investment value than the fraud complained of. For instance, the loss may be better explained as a result of an industry specific downturn, affecting all
major pharmaceutical stocks at once, or even a general and significant market downturn.

Consider Figure 3, in which the overall tendency of the specific share price (the above line) may be seen to correspond with that below, which may be said to represent the group of companies that are the target companies' competitors, or even the wider market. Any downturn witnessed in this type of situation may thus be better explained by extrinsic, external market forces, rather than company specific detrimental information such as the complained of misrepresentation and its disclosure. Figure 3, as opposed to the one preceding, would indicate that there are stronger explanations of proximate loss than the misrepresentation, such as a wider market downturn.

D. THE INTRINSIC FALL

However useful the above application of extrinsic measures of post misrepresentation events may be, it may be that an intrinsic, or even an intuitive approach, to the share price fall may better discern the events of post misrepresentation which may detract from the force of a claimed fraud – now at the level of causation. Consider the example of Figure 4:
While a misrepresentation may be supported economically in the initial rise, Figure 4 represents the possibility that later events may better explain, or at least compete to cloud, the causation of the loss complained of. In the stylized example of Figure 4 above (with disclosure 1 and then the drop following information 2) competing disclosures or events compete and indeed overwhelm the misrepresentation's importance. Following the pattern of the initial rise, this post misrepresentation fall could also be explained by way of a mirror measure, supposing perhaps that the second announcement had a greater detriment upon rational company expectation. What this intrinsic measure could not account for would be the blending inclusion of an extrinsic feature, such as post misrepresentation market loss to all companies of a class which was of greater weight than the individual reasons for the company downturn. Therefore, a consistent approach to filtering loss would necessarily include a view to both extrinsic and intrinsic features of surrounding behavior.

E. THE INTUITIVE FALL

Although an intuitive approach has been used mainly in the initial stage of the misrepresentation inquiry, a view of materiality found in a market price reaction, the approach should lend itself equally to post disclosure events as well. This would occur when events other than the fraud disclosure are recognized as a better explanation for
the plaintiff's loss even without the support of an event study. An intuitive approach to the post disclosure fall is appropriate whenever a single event may dwarf the importance of the fraud disclosure without complex financial evidence. For instance, the relationship represented in the above Figure 4 could be appreciated with a simple recitation of events, which would indicate that most of the plaintiff's loss occurred before the fraud was acknowledged. Indeed, in *Dura Pharmaceuticals, Inc. v. Broundo*, the Supreme Court of the United States followed such an intuitive post disclosure view. This is an important development for it stresses that an approach should be applied consistently to both the price rise and fall stages of events. The following analysis will indicate that intrinsic measures are arguably required to achieve a more accurate assessment of loss, but the key principle throughout is to strive for a balanced inclusion of all significant factors.

VII. QUANTIFYING LOSS

While the Supreme Court of the United States's recent decision in *Dura Pharmaceuticals, Inc. v. Broundo* confirmed a needed rational filter on post misrepresentation market inflation, it remains that a logical filter may be found that is applicable to all loss claims within the securities context. To give conceptual context to object of this project, the first level of filtering addresses the relationship between a misrepresentation and a responding stock price rise (whether intuitively (visually) or by intrinsic measure) as an entry question of reliance and materiality. The second level addresses the period between post disclosure and the sale of the share in order to filter out other events which may have otherwise caused the drop in share price. The third level addresses a post loss discount for all successful claims, which have progressed through stages one and two, based upon the logic of the Efficient Capital Markets Hypothesis ("ECMH"). However, before advocating for this new filter, I will give an overview of the status quo assumption on loss calculation by way of comparison.

A. TRADITIONAL TREATMENT OF LOSS

The treatment of loss in the securities context may be identified with that of traditional common law recovery, namely out of pocket loss. Out of pocket continues on the "but for" reasoning of reliance,

66. Id.
67. See supra note 11. See also Dunbar and Heller, *supra* note 1, at 513: “The most common procedure for measuring damages in a shareholder class action begins by examining the change in the stock price at the times of the corrective disclosures. Once an
to subtract the inflated amount of purchase from the value that would have been but for the misrepresentation, which is to be realized with the sale of the asset post disclosure of the inflating falsehood.

Judge Sneed, in an influential decision of the United State Court of Appeals for the Ninth Circuit, advocated that a chart be constructed with which to contrast a market price value line with a true value line.68 This approach affords with a notion of inflation, in which the trading and public representation of the security has been distorted away from an underlying sense of what the value would have been but for the misrepresentation. Judge Sneed's idea of a chart for market value line distorted from a value line may be appreciated with reference again to Figure 5.69

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68. Green v. Occidental Petroleum Corp., 541 F.2d 1335, 1344 (9th Cir. 1976) (Sneed, J., concurring). See also Eisenhofer, supra note 10, at 1425; Cornell, supra note 10, at 885-86.

69. A previous chart representation was given to Sneed's characterization in Cornell, supra note 10, at 887.
Note the line running constant from the point of misrepresentation and beneath the market price line, which may be said to reflect the true value (assuming no other competing events, as if the extrinsic filter above discovered no other factors). The point of importance in Judge Sneed's conception, and one which informs implicitly the out of pocket loss assessment method, is the meeting of the market value and true value lines. This contemplates a return to equilibrium, or an end to inflation, at a point post disclosure, acknowledging the misrepresentation. The belief is the market will adjust in response to the disclosure and return to a valuation sans misrepresentation; without the inflated expectations promised with the misrepresentation.

This introduces a window of recovery for those who purchase the security during its period of inflation. The inflated purchase price is then subtracted from post disclosure, or true value, as identified by a sale of the asset in response to and nearly following upon the disclosure, whether the sale is actual or imagined as a point of loss location. This relationship of subtraction is represented in Figure 6:

Figure 6:

B. A FURTHER FALL PAST EQUILIBRIUM

Central to this assessment, conception of loss is the treatment of a post disclosure sale as reflecting the true value minus the misrepresentation. However, what if a post disclosure price does not represent true value? Consider a situation in which the past disclosure sales are
at a lower point of price than the pre-misrepresentation. This is illustrated in Figure 7 below:

Figure 7:

What could explain the further diminishment, of $S$ occurring below the equilibrium line above? It could plausibly be explained as a feature of the securities trading, in which the momentum of bad news announcement is treated harsher than the equivalent good news appreciation of the misrepresentation.

Even accepting this vague characterization of unequal price fall (again assuming no other determinants), it begs the question of why the wronged party should be compensated for the additional price fall in true value? This is especially pressing in light of the fact that in so far as a company is able to compensate, it is the continuing shareholders who indirectly compensate, not the management and certainly not those who sold to the wronged during the inflated window.

My purpose, however, is to give rational explanation to an additional post disclosure fall, and in doing so to say something about all such securities claims and the need to temper their recovery on the out of pocket basis. This purpose requires an examination of how the sale price is determined – and with it, the imagined return to the true value. The perspective followed, accordingly, is the market price post disclosure as set by an incoming purchaser(s). The assessment of the incoming purchaser is most illustrative of the tendencies and valua-
tions at work. In keeping with the Efficient Capital Markets Hypothesis ("ECMH") assumption of rational investors and the instantaneous incorporation of all information that allows the initial procedure, the question to ask would be – absent any other information – why would purchasers value the share lower than as before the misrepresentation? The answer is simple enough if the ECMH is to be treated seriously and consistently – for if all information as to future prospects is incorporated instantly, then a rational investor must predict that class action litigation will be brought against the company, and that it is likely to be successful if the misrepresentation inflated share price.

Therefore, the rational and perfectly efficient assessment subtracts not only the lost expectation taken away with the disclosure of fraud, of untrue prospects, but the coming class action lawsuit that must be incorporated as relevant information as to value instantaneously.

The inflated exchange, between wronged and inflated fortunate seller, is an additional amount that will be extracted from the company even as the proceeds are in private hands beyond recovery or legal claim. Therefore, the incoming purchaser must devalue the future prospects of the share they propose to own, for the underlying asset that the share represents, the company, will be held accountable for the loss to the wronged event though it did not receive the proceeds. The surely coming lawsuit is a pure negative accounting in the near future that the rational investor contemplated under the ECMH is held to consider as a matter of course.

The company's true value as assessed by a purchaser would have to be based upon the calculation of lost expectation and future litigation loss owed to wronged purchasers. This is an additional extraneous loss to the company that the asset holder will have to contribute to indirectly in that the company negatives will increase, or, put differently, will add an additional drain upon company expectations and overall value.

C. Discounting Against Double Recovery

In addition to issues of investor insurance, and questions of one class compensating another, arises the further and more overt difficulty of the wronged sellers parties receiving double compensation. Considering that the vantage of post disclosure purchaser indicates two diminishments in value, lost expectation plus litigation loss, it becomes apparent that the wronged is compensated for both losses under out of pocket loss. Compensating based upon the post disclosure sale, therefore, means that the wronged receives an amount for both the but for expectations and, most importantly, based upon the
prediction of their future litigation, of which they will receive the funds directly. Therefore, under out of pocket loss, parties are able to recover for their litigation twice – (1) in its inclusion of damage assessment, (2) and then again as litigants. This results in an odd fraud situation in which the judicial claim of fraud is actually factored into and included within the loss amount that will form the basis of the litigation. Though this sounds circular, it is necessary and justified in the reality of the securities market context. Again, unlike the fraudulent painting example mentioned above, the securities case involves a unique contingent value that may be extracted from the asset post transfer. A circular concern is introduced in the securities context by the reality that purchasers of the asset are buying into an ongoing and fluctuating concern, which may be accountable to past transgressions of the part of company and its management. The security purchase is not fixed but must straddle between past periods of legal liability and their future payment in damages.

VIII. IDENTIFYING LITIGATION LOSS

If the circular nature of securities context indicates the danger of double compensation, or the normative imperative for accounting for this double compensation, the question remains of how to identify the litigation predicted loss to be discounted from all loss claims. An answer is argued to lie in the mirror measures of value introduced above. Though a misrepresentation distorts market valuation, it is impossible to define precisely a truer sense of value on a basis of “but for” the fraud. Not only must a post fraud vantage account for a predicted litigation discount, but there is also an ever present notion of market noise – surrounding factors that may impact upon share value independent of company specific information deemed rational qualifications. Further, while an event studies share profile may filter out significant or industry class movements that affect individual share price, this does not account for the surrounding “noise” of market movements that often may contain arbitrary or inexplicable decision-making.

The joining of Efficient Capital Markets Hypothesis (“ECMH”) and out pocket loss ignores the difficulty of market exactitude of accounting for unpredictable market noise, for both policy reasons and the judicial principle of awarding compensation despite difficulties in loss calculation. Similarly, the approach advocated here for discounting litigation loss, while it does not ignore completely the question of

70. On noise trading, in general see, Dunbar and Heller, supra note 1, at 475, 493; Goforth, supra note 3, at 900.
surrounding market noise, proceeds from an acknowledgement that the loss quantum must be arrived at from a rational approximation. It is impossible to know the mind of each post disclosure share purchaser, and it remains indeterminate as to what extent each purchaser factored the prediction of future and likely litigation resulting from the misrepresentation. Indeed, such contemplated factors, combining predictions of litigation loss and revenue loss resulting from the misrepresentation as well as other perhaps personal factors, may only achieve a vague or intuitive articulation in decision-making. It would be unreasonable to think that all individual purchasers could be called upon to give testimony as to the amount of litigation loss they anticipated to follow upon the company fraud disclosure, and to what extent this influenced their valuation of the company (their acceptable price of purchase) in the form of litigation weighted at twenty percent and diminished revenue at eighty percent, for instance.\textsuperscript{71}

Fortunately, just as the judicial assumption of market efficiency indicates that all information is instantly incorporated into share price, the value of market distortion is realized in a class action litigation claim, with observable loss to the company available in the amount of damages. The moment a company discloses a previous misrepresentation the future cost of a class action lawsuit against the company must be subtracted from future prospects, and detract from share price accordingly, if the logic of the ECMH is followed consistently. This may appear an artificially precise assumption for the post disclosure purchaser, but it is a consistent treatment of market efficiency; deeming the same efficient knowingness to the market for both the post and the pre misrepresentation purchasers to rely upon. The market believed in before as incorporating all information with perfection should be continued to be believed in, regardless of any conflicting compensatory or insurance concerns wrought by less sympathetic claimants.

The matter then remains of approximating rationally this relationship of litigation to expectation loss. The mirror measure comparison is first run on the basis of company expectations, such as future revenue, alone. This is represented in Figure 8:

\textsuperscript{71} And hence the initial procedural use of the fraud on the market assumption.
The purpose of this first run is to demonstrate a ratio in the relationship between underlying economic indicators for the company and its share price as determined by market trades. Notably, this ratio/relationship view offers the advantage of accounting for surrounding "noise" as it tracks a quality of market exuberance – the average and continuing amount of inflation above economic rationale. At this point, of the first mirror measure run, the picture is a straightforward rise and fall of expectations, and is in line with out of pocket loss that simply subtracts the inflated purchase price from the deflated sale price.

However, note the missing right hand dip with the intrinsic measure, as the underlying economic indicators for the company do not explain the additional post disclosure fall. Given the logical imperative of accounting for litigation loss resulting from the rational considerations of the post disclosure purchaser, it remains to approximate this aspect of loss.

A second run of the mirror measure incorporates retrospectively the amount of the litigation claim. By way of justification, as the efficient market assumption holds that all significant information is incorporated instantaneously into market share price then the subsequent amount of class action claim must have been predicted. If the assumption of market efficiency, however artificial, supports plaintiff class action certification, the consistency demands that the
assumption apply also to the later treatment of compensation sought (What is good for the goose...). If without consistency, then the judicial promotion of public policy departs from market integrity in favor of investor insurance, arguably to the point of a windfall for a fortunate class of investment losers.

This second run of mirror measure is represented in Figure 9.

Figure 9:

The central introduction is the damages claim amount in addition to the measure of company expectations that is related only to the information added and then subtracted by the misrepresentation and its disclosure. In this regard, the consistent treatment of market efficiency most noticeably presents a contrast to out of pocket loss recovery.

With this second run of the mirror measure, and introduction of rational loss prediction, it is important to keep the additional amount separate as it then allows for a further ratio of litigation loss prediction to that of economic prospects. As the goal is a rational approximation of the amount of litigation discount to the amount of expectation loss, the matter becomes extrapolating the ratio of mirror measures into the amount of loss of market downturn post-disclosure that is the basis of out of pocket loss.

Therefore, if litigation loss addition adds twenty-five percent to the revenue or fundamental loss, then that is the percentage to be dis-
counted from the market downturn following a misrepresentation's disclosure, so as to arrive at a rational approximation of the loss attributable only to the prospects promised and retracted as a result of a misrepresentation. This incorporation is represented in Figure 10:

![Figure 10:](image)

For plaintiffs to achieve the proceeds from their predicted litigation, they should await the culmination of their judicial action, rather than recover at both the point of sale that is increased by the very prediction of the claim, and then again at judgment.

**IX. CONCLUSION**

Supported by the assumption of market efficiency, many, if not all, securities litigation prosecutions have tended to settle after the initial stage of procedural ruling, before progressing to the damages stage. For the above proposed method of litigation discount to have applicability beyond pure judicial award, and to account for the preponderance of settlements, it would simply be a matter of altering the information presumption of the post disclosure purchaser.

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72. Parties must know that out of pocket will be the basis – if this is rejected, then one would assume that all settlement offers would be diminished in line with the first substantial and correct improvement which accounts for the the litigation claim discount.

73. See Coffee, supra note 38.
The proposed method for discounting litigation loss may be qualified to account for the realities of the securities litigation landscape if it becomes common knowledge to the average investing public that: (1) the great majority of such securities litigation cases settle before court determination, and; (2) an average amount of settlement percentage is discernible. If the first hurdle is met, then the averaging quality of the second is always possible assuming a number greater than two settlements that became the norm in such litigation matters. The point is that the predicted share price discount, due to litigation cost based upon a class action damage claim, would be replaced by the predicted cost due to the company from the likely average settlement struck by previous parties. The post disclosure purchaser assumption is moveable based upon the information available, and the most efficient reaction to it. If the disclosure of fraud on the part of company management does not lead investors to predict a future lawsuit, then the quantum of damages can proceed in more direct assessment of share price with and without the misrepresentation. However, so long as class action lawsuits remain a notable financial consideration for investors, the purchase of shares in the wake of a fraud disclosure should be deemed to include the prediction of future cost to the company whether it is in the form of damages or a settlement. Again, the object is the consistent treatment of investors under the assumption of economic efficiency, and not the favoring of any one specific group over another.