2011

Timing Is Everything: Markets, Loss, and Proof of Causation in Fraud on the Market Actions

Andrew M. Erdlen

Recommended Citation
Available at: http://ir.lawnet.fordham.edu/flr/vol80/iss2/15

This Note is brought to you for free and open access by FLASH: The Fordham Law Archive of Scholarship and History. It has been accepted for inclusion in Fordham Law Review by an authorized editor of FLASH: The Fordham Law Archive of Scholarship and History. For more information, please contact tmelnick@law.fordham.edu.
TIMING IS EVERYTHING:
MARKETS, LOSS, AND PROOF OF CAUSATION
IN FRAUD ON THE MARKET ACTIONS

Andrew M. Erdlen*

Plaintiffs in securities fraud class actions must prove that defendants’ misconduct caused the investors’ losses. The U.S. Supreme Court’s 2011 decision in Erica P. John Fund, Inc. v. Halliburton Co. reaffirmed that loss causation is a quintessential merits issue that must be decided at trial. In three recent trials, juries have held defendants liable with findings of fact that are inconsistent with the Supreme Court’s doctrinal framework for securities fraud causation. This Note examines these verdicts and encourages the courts to depart from the common law of fraud and tighten the meaning of causation. To do this, courts must adhere to the economic theory that sustains modern class actions. Because losing parties will invariably move for post-trial relief, courts should develop rules that incorporate conceptual clarity and well-defined mechanisms of proof.

TABLE OF CONTENTS

INTRODUCTION .......................................................................................... 878
I. CAUSATION IN SECURITIES LAW: EARLY REGULATION, MARKET
   EFFICIENCY, AND THE CLASS ACTION DEVICE .............................. 882
   A. The Realization of an Ancient Truth: The Promulgation of
      the Federal Securities Laws .................................................... 882
   B. Loss Causation: The New Gatekeeper ................................. 885
   C. Good News, Bad News, and Surprises: How Disclosure Affects
      Market Price ................................................................. 890
   D. The 800-Pound Gorilla: Class Actions ............................... 892
II. THE SUPREME COURT CAUSATION TRILOGY:
   BASIC, DURA, AND HALLIBURTON ........................................ 893
   A. Back to Basic: Fraud on the Market and the Rebuttable
      Presumption of Reliance ..................................................... 894
   B. Legislative Reform: The PSLRA Codifies Causation .......... 896

* J.D. Candidate, Fordham University School of Law, 2012; B.A., University of Pennsylvania, 2002. I would like to thank my family, friends, and Haley, for their enduring support throughout this process. I am grateful to Professor Sean Griffith for his insights and for serving as my advisor. I would especially like to thank those who reviewed drafts; your invaluable comments dramatically improved the Note. I should also indicate that prior to law school, I worked on the Vivendi Universal, S.A. Securities Litigation, which I discuss at length in this Note.
C. A Tangle of Causation: The Dura Decision ........................................ 898
D. No Harm, No Foul: A Brief Note on Dura and Types of Damages .......................................................... 899
E. A Merits Issue: Halliburton’s Impact on Proof of Loss Causation ................................................................................. 901

III. THE EVIDENCE: HOW DO YOU PROVE LOSS CAUSATION AT TRIAL? ............................................................................................ 902
A. The Event Study: Making Sense of the “Tangle of Factors” ... 903
B. Where the Money Is: Damages & Inflation Methodologies .... 906
C. Coming Clean: Disclosure Mechanisms ................................................................. 907
   1. The Corrective Disclosure ........................................................................... 907
   2. Indirect or Partial Disclosure: Materialization of the Risk and “Leakage” .............................................................. 908
D. A Morass of Misstatements: Linking Damages Models to Specific Misrepresentations .................................................. 910
E. Lost at Sea? Three Recent Verdicts ........................................................ 911
   1. The Household Verdict ................................................................. 911
   2. The Vivendi Verdict ........................................................................... 914
   3. The Apollo Verdict ........................................................................... 916

IV. THE INQUIRY, COLLAPSED: THE COURTS MUST DEVELOP RULES FOR PROOF OF LOSS CAUSATION ................................................... 917
A. Unpredictable Liability Does Not Serve the Legislative Goals of the Securities Laws .................................................. 918
B. The Bearer of Bad News? The Market Proves Loss Causation ................................................................................ 919
C. Modern Theory and the Common Law: The Elements of a Rule 10b-5 Suit Are Inextricable ............................................. 920

CONCLUSION ............................................................................................. 922

INTRODUCTION

In its most recent pronouncement on causation in securities fraud, the U.S. Supreme Court held that plaintiffs do not need to prove loss causation as a prerequisite to class certification.1 Instead, the Court reaffirmed that loss causation, which “requires a plaintiff to show that a misrepresentation that affected the integrity of the market price also caused a subsequent economic loss,”2 is a quintessential merits issue. The unanimous Court repudiated the Fifth Circuit’s approach to loss causation,3 but the decision did not address problematic issues of proof that emerged following several recent mega-trials. Causation played a prominent role in each of these verdicts, and because of its conceptual sophistication, it is an intensely litigated issue. This Note argues that loss causation is the overriding issue in securities class actions, and it suggests some conceptual guidelines for

2. Id. at 2186.
3. See id.
courts to consider when ruling on post-trial issues of proof. This Note urges the courts to develop bright-line rules requiring plaintiffs to identify the mechanisms that reveal the truth of concealed fraud to the markets.

This Note focuses on class actions, the most prominent remedy for aggrieved investors. Class actions brought pursuant to the federal securities laws have astonishing economic impact, and have been referred to as the “800-pound gorilla” dwarfing all other class actions. These claims typically arise under Section 10(b) of the Securities Exchange Act of 1934 (‘34 Act) and Securities and Exchange Commission (SEC) Rule 10b-5 (Rule 10b-5), the predominant antifraud provisions of the federal regulatory scheme. This framework permits plaintiffs to sue the issuers of securities for disseminating false or misleading public statements that cause economic loss. Courts fashioned an implied private right of action from Section 10(b) of the ‘34 Act, and shaped its contours with principles of common law fraud. Securities class actions differ from common law fraud, however, and feature special rules.

Because Rule 10b-5 broadly proscribes fraudulent conduct, it is the most robust legal remedy available to investors. Since 1996, plaintiffs have filed more than 3200 securities class actions in the federal courts. These actions have massive economic consequences. From 1997 through 2009, corporate class action defendants have lost a total annual average of $133 billion in market capitalization following the final corrective disclosure of

9. See generally 3 HAZEN, supra note 7, § 12.3[3], at 522–29; infra Part I.A. The courts have read the elements of common law fraud into Rule 10b-5 claims. See Dura, 544 U.S. at 342 (requiring loss causation); Basic Inc. v. Levinson, 485 U.S. 224, 232, 243 (1988) (requiring reliance and materiality); Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 473–74 (1977) (requiring deception and manipulation); Ernst & Ernst v. Hochfelder, 425 U.S. 185, 212–14 (1976) (requiring scienter, a wrongful mental state). An omission is material if “there is a substantial likelihood that a reasonable shareholder would consider it important.” Basic, 485 U.S. at 231 (quoting TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 439 (1976)).
10. Securities class actions differ from common law misrepresentation and deceit actions, and securities laws were partially designed to supplement common law remedies. See Basic, 485 U.S. at 243–44, 244 n.22 (“The modern securities markets, literally involving millions of shares changing hands daily, differ from the face-to-face transactions contemplated by early fraud cases . . . .”).
11. See 3 HAZEN, supra note 7, § 12.3[2], at 520–21.
12. See CORNERSTONE RESEARCH, SECURITIES CLASS ACTION FILINGS: 2010 YEAR IN REVIEW 3 (2011), available at http://www.cornerstone.com/files/News/df1151e6-dee6-447a-a125-6c5ed949877/Presentation/NewsAttachment/789fd0d2-16c4-4bdc-b29d-bc0f4ed9c622/Cornerstone_Research_Filings_2010_YIR.pdf. This total is current through December 31, 2010. Id.
class periods. This loss in market capitalization does not easily translate into a measure of damages that plaintiffs could recover in subsequent litigation, however. Determining damages across lengthy class periods is a far more challenging endeavor, and a conceptual focus of this Note.

The Supreme Court directly addressed loss causation before Halliburton. In a 2005 decision, Dura Pharmaceuticals, Inc. v. Broudo, the Court unanimously held that overpaying for a stock that was distorted by fraud is not sufficient to plead the element of loss causation. A mere drop in stock price following the revelation of a concealed truth is insufficient to establish loss causation. The Court held that there must be a “causal connection between the material misrepresentation and the loss.” As the Court observed, drops in stock price can be caused by any number of factors, and fraud is only one of them.

While the Dura decision provided the lower courts with some guidance, the decision only addressed pleading standards; courts continue to struggle with loss causation’s standard of proof. In addition to proving that the investor purchased the security at a distorted price, courts interpret Dura to require plaintiffs to prove not only that the stock price declined after the truth made its way to the marketplace, but that the decline was not a result of some factor other than fraud. Courts have recognized various theories of proof that allegations of fraud actually and proximately caused losses. Expert testimony plays the critical role in establishing causal links; the strength of an expert’s damages model can determine the survival of a plaintiff’s case. These requirements raise difficult issues of proof, making loss causation one of the most heavily litigated issues in modern securities fraud.

13. See id. at 2 (using the disclosure dollar loss method to estimate the impact of information revealed at the end of the class period).
14. See id. at 24.
15. See Elizabeth Chamblee Burch, Reassessing Damages in Securities Fraud Class Actions, 66 MD. L. REV. 348, 349–50 (2007) (“[N]o coherent doctrinal statement exists . . . .”); see also infra Part II.D.
17. Id. at 342.
18. Id.
19. Id. at 343 (“Given the tangle of factors affecting price, the most logic alone permits us to say is that the higher purchase price will sometimes play a role in bringing about a future loss.”); see infra Part III (discussing the various factors that impact the market price of a security).
21. See infra Part III; see also supra note 4, at 339.
24. See Olazábal, supra note 4, at 339.
Though few securities class actions proceed to trial, several recent verdicts produced results that are inconsistent with the Supreme Court’s holding in *Dura*. This Note encourages the lower courts to fashion rules that prevent conflicts between the economic theory supporting the Supreme Court’s class action and causation jurisprudence, and mechanisms of proof. This Note begins by examining the essential tools that inform the causation analysis. Part I considers the history and remedial purpose of the federal securities laws. Part I then focuses on the history of the causation element, the economic theory underlying proof of loss causation, and the maintenance of class actions. Part II addresses the Supreme Court’s causation decisions in *Basic Inc. v. Levinson*, *Dura*, and *Halliburton*. Those three decisions provide the legal framework for the causation analysis; this Note next examines more practical considerations. In Part III, this Note discusses the evidentiary aspects of loss causation. Part IV of this Note urges the courts to tighten the loss causation analysis to remain consistent with the Supreme Court’s doctrinal framework.

Since causation and damages are inextricable, jury verdicts must not depart from the expert testimony proffered at trial. These results do not further the goals of the securities laws, and more directed efforts to streamline the process should yield more accurate verdicts. When deciding post-trial motions, the courts should rely on the economic theory supporting the class device as guide to proof of causation. Courts should reject verdicts in favor of parties that do not put forth sufficient evidence connecting investor losses to disclosures that initially distort market price with those disclosures that reveal the nature of the fraud to the market. This


necessarily requires identification of the mechanism that revealed the fraud, and proof that it caused a loss.

I. CAUSATION IN SECURITIES LAW: EARLY REGULATION, MARKET EFFICIENCY, AND THE CLASS ACTION DEVICE

Loss causation evolved over many years. Since causation is essential to a claim, it is important to understand the background of the securities laws and the common law’s influence on private securities actions. This part first reviews the history of the securities laws and examines the early loss causation cases. It then examines the economic theory that eventually allowed plaintiffs to overcome a longstanding hurdle to class certification. These concepts coalesce into proof of causation by establishing the effect of disclosure on the market price of a security, and thus the amount of damages the fraudulent conduct caused.

A. The Realization of an Ancient Truth: The Promulgation of the Federal Securities Laws

The federal securities laws are the product of our nation’s greatest financial catastrophe—the Great Depression. But the first calls for securities regulation occurred during an economic crisis that took place over twenty years before the October 1929 stock market crash. Following the Panic of 1907, President Theodore Roosevelt implored Congress to remedy egregious practices on Wall Street. Widespread abuses included the manipulation of the price of securities to corner commodities markets. Despite investigations that exposed these corrupt practices, Congress failed to enact any legislation after the Panic of 1907.

In the years leading up to the Great Depression, the stock markets grew rapidly. Trading became extremely profitable, and unsophisticated investors playing the market conducted minimal investigation while assuming massive risk. In addition to the lingering problem of speculation, reformers suspected that brokers and underwriters distributed


29. See id. at 396. According to President Roosevelt, “There is no moral difference between gambling at cards or in lotteries or on the race track and gambling in the stock market.” Id. (quoting 42 Cong. Rec. 1347, 1349 (1908)).

30. Id. at 399. Former New York Governor Charles Evans Hughes appointed a state committee to investigate speculation in the market, defined at the time as “forecasting changes of value and buying or selling in order to take advantage of them.” See id. at 397. Rather than a deliberate, informed investment, the Hughes Committee focused on trading activity “with a view to profiting from price changes.” Id.

31. See id. at 396–97 (“The government’s most important response to the panic was to investigate.”).

32. See id. at 406–07.


34. See supra note 30 and accompanying text.
securities through false, opaque, or otherwise inadequate disclosures. A significant portion of these transactions in securities were “on margin,” where an investor borrows much of the stock’s purchase price. When the markets ultimately slowed down, lenders began calling debt. Financially strained investors sold securities en masse, depressing market prices. The speculation bubble had burst; investor confidence disappeared, and the markets soon failed. Speculative trading, coupled with inadequate diligence and poor disclosure, doomed Wall Street. These events substantially caused the stock market crash of 1929 that kick-started the Great Depression.

The congressional response to the 1929 crash primarily sought to prevent another market meltdown. Sensational investigations into Wall Street practices exposed pervasive short-selling and price manipulation tactics. After the election of 1932, Franklin Delano Roosevelt’s incoming administration urged remedial legislation. The proposed regulations would have to balance the elimination of economically destructive behavior with preserving investors’ ability to conduct free market transactions. Roosevelt introduced securities legislation that he hoped would restore the “ancient truth” that market participants handling other people’s money are trustees who must act in good faith.

Congress soon passed the Securities Act of 1933 (‘33 Act), which regulated the distribution of securities by encouraging disclosure of information pertinent to the investment. The ‘33 Act was premised on the assumption that if stock prices are determined by public perception, and public perception is clearer with thorough and accurate disclosure of information about the issuer, securities legislation should strive to ensure full and adequate disclosure.

35. See Cox et al., supra note 33, at 6.
36. Id. at 5.
37. See id.
38. See id.
39. See id. at 5–6.
40. See id.
41. See id.; Hazen, supra note 7, § 1.2[3], at 34.
42. See Thel, supra note 28, at 409.
43. See id. at 410–13.
44. See id. at 414–15.
45. See id. at 397–98.
46. See 77 Cong. Rec. 937 (1933) (message of President Franklin Delano Roosevelt).
49. See Thel, supra note 28, at 409.
was to deter misconduct. The ‘33 Act proscribed fraud in connection with public offerings and provided remedies for purchasers of securities.

Congress’s work was not done. The ‘34 Act followed, with much broader protections for both purchasers and sellers. The ‘34 Act regulated all aspects of trading on the marketplace, and imposed periodic disclosure requirements on any company whose stock is listed on a national exchange. The ‘34 Act provided sweeping protections of investors through a philosophy of mandatory disclosure. To implement these policies, Section 4(a) of the ‘34 Act created the SEC. Section 10(b) contains the ‘34 Act’s strongest antifraud provision and affords the SEC wide discretion to promulgate rules in furtherance of Section 10(b)’s legislative purpose.

Section 10(b) ultimately provided the statutory basis for the modern securities class action, though it contained no express right of action. In 1942, pursuant to its rulemaking authority conferred by Section 10(b), the SEC promulgated Rule 10b-5 as a general antifraud provision.

---


51. See Cohen, supra note 48, at 1340–41; see also 1 HAZEN, supra note 7, § 1.2[3][A], at 36.


53. See 1 HAZEN, supra note 7, § 1.2[3][B], at 37–38.


56. Section 10(b) states in part:

(a) To employ any device, scheme, or artifice to defraud,

(b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or

---

57. See id.; 1 HAZEN, supra note 7, § 1.3, at 53.

58. See 15 U.S.C. § 78j; James D. Gordon III, Acorns and Oaks: Implied Rights of Action Under the Securities Acts, 10 STAN. J.L. BUS. & FIN. 62, 65 (2004); see also Blue Chip Stamps, 421 U.S. at 729 (“Nor does the history of this provision provide any indication that Congress considered the problem of private suits under it at the time of its passage.”). Section 10(b)’s regulatory counterpart, Rule 10b-5, similarly contains no express right of action. See 17 C.F.R. § 240.10b-5 (2010).

59. Rule 10b-5 states in part:

(a) To employ any device, scheme, or artifice to defraud,

(b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or
10b-5’s reach extends to all misstatements made in connection with a purchase or sale of a security. The SEC did not originally envision the rule to confer a private right of action, but courts have long held that Rule 10b-5 permits plaintiffs to sustain a claim for securities fraud.

Rule 10b-5 remains the most potent weapon of enforcement for a securities plaintiff. Private actions promote the ‘33 and ‘34 Acts’ objectives of deterring corporate misconduct, as well as making whole those who have been duped by corporate deceit. Since a private action arising under Rule 10b-5 is a judicial creation, the courts initially defined its elements of proof. Plaintiffs asserting claims pursuant to Section 10(b) of the ‘34 Act and Rule 10b-5 must prove six elements: (1) a material misrepresentation or omission; (2) scienter; (3) a connection with the purchase or sale of a security; (4) reliance; (5) damages; and (6) loss causation, defined as a “causal connection between the material misrepresentation and the loss.” This Note focuses on the causation element, which was codified in 1995 but had its genesis in the common law.

B. Loss Causation: The New Gatekeeper

Loss causation was first recognized as a distinct element of securities fraud in Schlick v. Penn-Dixie Cement Corp. in 1974. Since then, loss causation has presented conceptual difficulties that plague courts and litigants. Although it may be conceptually elusive, loss causation begins when fraud drives a stock price above its intrinsic worth, and as a consequence, a buyer overpays for the stock but is subsequently unable to...
recover that overpayment in the market.\textsuperscript{70} This overpayment distorts the true value of the security, and the difference between the intrinsic worth of the stock and its market price is commonly referred to as inflation.\textsuperscript{71} When the truth of the fraud is revealed, plaintiffs must tie their alleged losses to both the initial misstatement that distorted the market price, as well as to the later disclosure of the fraud.\textsuperscript{72} Though loss causation is still not uniformly understood, this section reviews the history of the causation element and its origins at common law.\textsuperscript{73}

Loss causation, as modern courts understand it, was not always an element in Rule 10b-5 cases.\textsuperscript{74} The traditional causation analysis considered whether the plaintiff engaged in the securities transaction in reliance on a defendant’s misstatement.\textsuperscript{75} Early securities class actions indicated that causation required something more than reliance, but those courts did not indicate the nature of the additional proof.\textsuperscript{76} Without the additional proof, the courts reasoned, a defendant would be liable to anyone that relied on the misstatement as a cause of the transaction no matter the reasons for the loss.\textsuperscript{77} Finally, in 1974, the Second Circuit bifurcated causation in \textit{Schlick}.\textsuperscript{78} This decision is widely cited as the first to separate individual reliance, which occurs when “the violations in question caused the [purchaser] to engage in the transaction in question,” from loss causation, where “the misrepresentations or omissions caused the economic harm.”\textsuperscript{79}

Unlike the \textit{Schlick} court, the \textit{Huddleston v. Herman & MacLean} court provided some guidance for proof of loss causation.\textsuperscript{80} In \textit{Huddleston}, the Fifth Circuit reversed a district court decision not to instruct the jury on both reliance and loss causation.\textsuperscript{81} The court defined loss causation as the plaintiff’s proof that “the untruth was in some reasonably direct, or proximate, way responsible for his loss.”\textsuperscript{82} Thus, to prove causation, a

\begin{itemize}
  \item \textsuperscript{70} Madge S. Thorsen et al., \textit{Rediscovering the Economics of Loss Causation}, 6 J. Bus. & Sec. L. 93, 94–95 (2006).
  \item \textsuperscript{71} \textit{See} Tabak, supra note 22, at 1.
  \item \textsuperscript{72} \textit{See} Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 342–43 (2005).
  \item \textsuperscript{73} \textit{See generally} Jill E. Fisch, \textit{Cause for Concern: Causation and Federal Securities Fraud}, 94 Iowa L. Rev. 811, 815 (2009).
  \item \textsuperscript{74} \textit{See} Fox, supra note 20, at 834–35.
  \item \textsuperscript{75} \textit{See} \textit{Restatement (Second) of Torts} § 525 (1977) (listing the elements of common law fraudulent misrepresentation); \textit{see also} Basic Inc. v. Levinson, 485 U.S. 224, 243–44 (1988).
  \item \textsuperscript{76} \textit{See} Fox, supra note 20, at 835.
  \item \textsuperscript{77} \textit{See id.} at 834–36 (quoting Globus v. Law Research Serv., Inc., 418 F.2d 1276, 1292 (2d Cir. 1969) (observing that a defendant could be liable “to all the world”)).
  \item \textsuperscript{78} \textit{See} Schlick v. Penn-Dixie Cement Corp., 507 F.2d 374, 380–81 (2d Cir. 1974).
  \item \textsuperscript{79} \textit{See id.} (noting that loss causation is demonstrated “rather easily” by proof of economic damage); Fisch, supra note 73, at 816–17 (“The court—citing almost no authority—explained that causation consists of two distinct components . . . .”).
  \item \textsuperscript{80} \textit{See} 640 F.2d 534, 549 (5th Cir. 1981), aff’d in part, rev’d in part, 459 U.S. 375 (1983); Fox, supra note 20, at 836.
  \item \textsuperscript{81} \textit{Huddleston}, 640 F.2d at 549–50. Courts often interchange transaction causation and reliance when describing “but-for,” or actual, causation. \textit{See} Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 338–42 (2005); Fox, supra note 20, at 842.
  \item \textsuperscript{82} \textit{See} \textit{Huddleston}, 640 F.2d at 549 & n.24.
\end{itemize}
plaintiff must prove that he would not have completed the transaction if he knew the truth, and that the misrepresentation must “touch[] upon the reasons for the investment’s decline.”

These “twin requirements” of loss causation and transaction causation are now firmly established in case law, but courts applied these standards inconsistently in the years following Schlick. Fortunately, modern courts have provided litigants with more concrete guidance. Courts analyze causation as three discrete yet related concepts. First, loss causation is sometimes used to describe individual reliance—whether a plaintiff actually relied on material misstatements to invest in a company’s stock. Reliance is also known as “transaction causation.” While transaction causation is an independent element of a securities fraud claim, it is entwined with the elements of materiality, loss causation, and damages. These elements all support the same substantive issue: the amount of inflation that a misrepresentation causes, and therefore the amount that a plaintiff purchaser overpays. Reliance in securities class actions typically is satisfied by asserting the “fraud on the market” (FOTM) theory, discussed in Part II of this Note.

Secondly, loss causation refers to the but for causal relationship between the alleged misconduct and the shareholder’s loss. Under this approach, some portion of a plaintiff’s loss must be attributable to a defendant’s misstatements or omissions; in other words, the misstatements must be a cause-in-fact of the loss. This form of loss causation requires plaintiffs to show a sufficient connection tying the fraudulent conduct with the harm suffered. The mechanism of proof is a corrective disclosure, an event that reveals the fraud that the original misstatement concealed.

83. See id. at 549.
84. See Fox, supra note 20, at 837.
85. See Olazábal, supra note 4, at 345.
86. See In re Omnicom Grp., Inc. Sec. Litig., 597 F.3d 501, 509–10 (2d Cir. 2010) (distinguishing between different types of loss causation). This section focuses primarily on the law of the Second Circuit, the preeminent arbiter of securities disputes. See Jordan Milev et al., Nat’l Econ. Research Assoc., Trends 2010 Year-End Update: Securities Class Action Filings Accelerate in Second Half of 2010; Median Settlement at an All-Time High 4 (2010), http://www.nera.com/nera-files/PUB-Year_End_Trends_1210.pdf (noting that of the twelve federal circuits, the Second Circuit saw the most securities class action filings from 2006–09).
87. See In re Omnicom, 597 F.3d at 509–10. Reliance concerns the causal relationship between the misrepresentation and the plaintiff’s decision to buy or sell. See infra Part II.A.
88. See In re Omnicom, 597 F.3d at 509–10; see also infra Part II.A.
89. See McCabe v. Ernst & Young, LLP, 494 F.3d 418, 429–30 (3d Cir. 2007).
90. See Fox, supra note 20, at 845.
91. See id.; infra Part II.E.
92. See infra Part II.A (discussing the presumption of reliance and the elements of fraud on the market).
93. In re Omnicom, 597 F.3d at 510.
94. See id.
95. Id. (quoting Lattanzio v. Deloitte & Touche LLP, 476 F.3d 147, 157 (2d Cir. 2007)); see infra Part III.C.
96. See infra Part III.C (discussing the different types of theories of loss causation).
Some commentators refer to this approach as “strict” loss causation. If the value of the security does not decline as a direct result of the misrepresentation, there can be no loss attributable to the misrepresentation. Until the market corrects the price following a corrective disclosure, the cost of the misrepresentation is reflected in the price of the security, and this inflation can still be recovered by reselling the security at a price that incorporates the inflation. Thus, there is no loss causation until inflation dissipates.

Finally, loss causation can refer to whether the events that actually caused the loss are within the class of events that Congress intended the securities laws to protect against. Courts analogize this concept to the tort law doctrine of proximate cause, a policy limitation on liability. Similar to tort, under this articulation of loss causation, the plaintiff’s damages must be foreseeable, and they must be caused by a materialization of the concealed risk. Second Circuit law limits that risk to a “zone of risk” concealed by the misstatements. In effect, this examines how closely the subject of the fraudulent statement relates to the loss, and whether that loss was foreseeable.

Courts qualify the tort analogy. While a foreseeable injury in tort is one proximately caused by a defendant’s fault, the harm resulting from a drop in a company’s share price is not caused by a defendant’s misstatement, but rather as a result of market realization of the circumstances concealed by the misstatement.

97. Olazábal, supra note 4, at 339–40 & n.3 (citing Semerenko v. Cendant Corp., 223 F.3d 165, 185 (3d Cir. 2000)).
98. See Olazábal, supra note 4, at 339–40 & n.3.
99. See id. The owner of the security suffers no loss, since the inflation can be passed along to the next unsuspecting purchaser. See Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 342 (2005); Olazábal, supra note 4, at 376.
100. See supra note 70 and accompanying text.
101. See in re Omnicom Grp., Inc. Sec. Litig., 597 F.3d 501, 511 (2d Cir. 2010) (noting that proving reliance, as well as either of the corrective disclosure or materialization of the risk approaches, is sufficient to establish causation); Lentell v. Merrill Lynch & Co., 396 F.3d 161, 172–75 (2d Cir. 2005); see also AUSA Life Ins. Co. v. Ernst & Young, 206 F.3d 202, 209 (2d Cir. 2000) (articulating the analogy to proximate cause); infra Part III.B (discussing corrective disclosure and materialization of the risk theories); infra note 116 (summarizing circuit law).
102. See Lentell, 396 F.3d at 172–73.
103. See in re Omnicom, 597 F.3d at 513; infra Part III.C.2 (discussing the materialization of the risk theory).
104. See in re Omnicom, 597 F.3d at 513; Castellano v. Young & Rubicam, Inc., 257 F.3d 171, 186 (2d Cir. 2001). Not all circuits recognize this theory. See Schleicher v. Wendt, 618 F.3d 679, 683–84 (7th Cir. 2010) (noting that the materialization of a concealed risk theory “is not a legal doctrine” and it “adds nothing to the analysis” because the fraud lies in the misstatement and the loss is realized when the truth is revealed).
105. See McCabe v. Ernst & Young, LLP, 494 F.3d 418, 430 (3d Cir. 2007) (quoting Berkeley Inv. Grp., Ltd. v. Colkitt, 455 F.3d 195, 222 (3d Cir. 2006)).
106. See Lentell, 396 F.3d at 172–73. See generally Fisch, supra note 73 (discussing the common law background of causation).
107. See Lentell, 396 F.3d at 172–73.
Additionally, the tort metaphor is compromised by its origin in the common law. Causation in Rule 10b-5 actions has a different meaning than it would in tort. Securities fraud is a statutory claim, and the elements of a statutory claim are those that the legislature intended. Thus, proximate cause determinations are closely tethered to statutory intent.

The disclosure requirements of the securities laws seek to allow investors to make accurate judgments about a company’s intrinsic value, rather than force companies to speculate about distant or nebulous events. Therefore, a misstatement or omission is the proximate cause of an investment loss if the risk that caused the loss was within the “zone of risk” that the alleged misrepresentations concealed. A loss is foreseeable if the misstatement “concealed something from the market that, when disclosed, negatively affected the value of the security.”

Courts in the Second Circuit require plaintiffs to prove reliance, as well as either of the two articulations of loss causation, to establish causation. Other circuits apply these or similar tests for pleading and proof of loss causation.

Causation is closely related to damages. Damages in securities cases are calculated based on the impact of disclosure on the market price of a security; proof of damages and causation assumes some degree of market efficiency. This Note next explores the economic theory underlying the determination of causation and damages in securities cases.

108. See id.; supra note 9 and accompanying text.
109. See In re Omnicom, 597 F.3d at 510.
111. See In re Omnicom, 597 F.3d at 513–14 (granting defendants summary judgment where generalized investor concern causing a temporary share price drop did not raise a genuine issue of material fact as to loss causation).
112. See id. at 514.
113. See Lentell, 396 F.3d at 172–73.
114. See id. at 173.
115. See In re Omnicom, 597 F.3d at 511.
116. See Ind. State Dist. Counsel of Laborers & Hod Carriers Pension & Welfare Fund v. Omnicare, Inc., 583 F.3d 935, 944–47 (6th Cir. 2009) (deciding motion to dismiss); Alaska Elec. Pension Fund v. Flowserve Corp., 572 F.3d 221, 230 (5th Cir. 2009) (per curiam) (deciding class certification and holding that the corrective disclosure does not need to precisely mirror the misstatement); In re Williams Sec. Litig.-WCG Subclass, 558 F.3d 1130, 1140–42 (10th Cir. 2009) (deciding summary judgment and rejecting plaintiff’s theory because it failed to identify the mechanism that revealed the fraud); McCabe v. Ernst & Young, LLP, 494 F.3d 418, 426 (3d Cir. 2007) (deciding summary judgment); Tricontinental Indus., Ltd. v. PricewaterhouseCoopers, LLP, 475 F.3d 824, 843 (7th Cir. 2007) (deciding motion to dismiss and holding that causation must be applied on a statement-by-statement basis).

Though various theories exist as to how to predict stock market behavior, many economists have adopted the efficient capital markets hypothesis (ECMH) as a core working hypothesis. The ECMH ties stock price to information and expectations. The market values a security by measuring the present value of the future cash flows generated by the corporation’s assets discounted by the company’s cost of capital. According to the theory, the price of publicly-traded securities reflects the aggregation of all well-informed investors’ beliefs about the investment’s future payouts. If a company misstates its past or present financial condition, and the market is unaware of the firm’s true financial condition, the investing public’s expectations of a company’s future performance are inaccurate. In turn, the market price of the security adjusts to reflect this new information as soon as the market becomes aware of it. While market participants may value the information differently, the aggregation of different valuations establishes the market price, and these divergent valuations make trading possible.

If stock prices track expectations, it follows that even if a company announces good news, the market price of a stock will not rise if this news is anticipated; on the other hand, if the good news is not as good as expected, share price could actually decline. Most importantly, when a firm announces information that the market expects, or that is already known, market price should not change. This central tenet of the ECMH is the basis for FOTM, the primary theory of reliance in securities class actions.

118. See ALLEN ET AL., supra note 60, at 130.
120. See Michael J. Kaufman, At a Loss: Congress, the Supreme Court and Causation Under the Federal Securities Laws, 2 N.Y.U. J.L. & BUS. 1, 40 (2005). Famed economist John Maynard Keynes first suggested that this form of market efficiency is untenable. See Fischel, supra note 117, at 913. He analogized traders’ conceptions of asset value to predicting the winner of a beauty contest. Id.
121. See ALLEN ET AL., supra note 60, at 130; see also COX ET AL., supra note 33, at 104–06 (noting the difficulties inherent in such a sweeping theory).
122. See Kaufman, supra note 120, at 40.
123. See id.
124. See COX ET AL., supra note 33, at 104.
126. See id. at 707. The share price already incorporates that information. See id.
127. See Fischel, supra note 117, at 917–22. FOTM is discussed in Part II of this Note.
Perhaps because of its sweeping application, market efficiency has come under intense scrutiny.128 Another theory, behavioral finance, posits that markets are not necessarily information-efficient.129 According to the theory, biased, irrational investors can move the markets.130 These “noise” traders transact in securities for motivations related to behavioral biases.131 As a consequence, noise traders make the markets possible;132 noise oscillates the value of a security away from its fundamental value.133 This activity creates liquidity in the market and allows informed traders to profit based on mispriced securities;134 after all, if everyone agreed on prices, trading would cease to exist.

Theorists take the existence of noise trading as a given, but are uncertain about the extent of its effect on the market.135 If its effect is substantial, noise trading would reduce market efficiency.136 Pervasive behavioral biases pose problems for FOTM: because noisy markets are irrational, the scope of liability for improper disclosure would be unpredictable.137 Damages would be purely speculative, because many consider it impossible to ascertain the amount of noise represented in market prices.138 Proponents of ECMH refute this criticism, however, by arguing that even if some market participants make irrational investing decisions, sophisticated traders quickly exploit and eliminate unexplored profit opportunities.


129. See Ribstein, supra note 128, at 137–39 (illustrating some anomalies in the ECMH); see also Fox, supra note 128, at 299 (explaining that overconfidence in investing is the most consistent characteristic in behavioral finance).

130. See Ribstein, supra note 128, at 137–39.

131. See id. at 137 (noting noise traders’ cognitive and heuristic errors, such as overreaction to news).

132. See Fox, supra note 128, at 201–02.

133. See id. at 202.

134. Id.

135. See id. (arguing that noise trading makes it impossible to ascertain fundamental value).

136. See Ribstein, supra note 128, at 145; see also Fox, supra note 128, at 204–06 (discussing anomalies in ECMH).

137. See Ribstein, supra note 128, at 137–39. But see Fischel, supra note 117, at 914 (noting that noise trading “increases volatility but does not create any detectable upward or downward bias in pricing”).

138. See Fischel, supra note 117, at 914; supra note 135 and accompanying text.
created by mispriced securities. At the very least, since the value of a security cannot be isolated from indeterminate noise, the assumption of market efficiency is the most accurate indicator of a security’s fundamental value. In other words, the ECMH is an elegant but assailable theory, and it is the best available. Class action plaintiffs and their lawyers realized the advantages of the ECMH, and soon used it to resolve the procedural hurdles of satisfying the unique requirements of class certification.

D. The 800-Pound Gorilla: Class Actions

Class actions are a mechanism that permits mass aggregation of claims. They are big, broad, and expensive. They are also special. Class actions are an exception to the general rule that a judgment binds only those that are parties to the action. Plaintiffs that seek to represent a class of similarly-situated individuals must first satisfy the prerequisites of Federal Rule of Civil Procedure 23 to maintain a class action. Securities class action plaintiffs typically seek class certification under Rule 23(b)(3), which requires putative classes to satisfy two additional requirements. A “(b)(3)” class must demonstrate that common issues of fact or law predominate over individual issues, and that the class action is a superior method of adjudication. These stringent requirements ensure that class representatives adequately represent the interests of absent class members. A class action judgment binds all members of the class and has preclusive effect.

A court can certify a class only after conducting a rigorous inquiry into the Rule 23 prerequisites. Certification is a watershed moment that substantially increases the settlement value of a lawsuit. Prior to the Supreme Court’s Basic decision in 1988, defendants attempted to defeat

---

139. See Fox, supra note 128, at 192 (noting that under ECMH, “in a free financial market, even a tiny rational minority would invariably prevail”). If irrational investors are willing to buy or sell a security at a price different from its optimal future return, sophisticated investors will exploit the opportunity for gain until it no longer exists. See id.

140. See Fischel, supra note 117, at 914 (noting that until noise trading is detectable, “knowing that prices reflect the expectations of noise traders will not lead to any superior method for ascertaining the underlying value of assets.”); id. at 915 (“[I]t takes a theory to beat a theory and thus far none exists.”).


142. FED. R. CIV. P. 23. Rule 23 requires, among other things, that the claims of the class share some common question of fact or law, and the class representative must assert claims typical of the class as a whole. FED. R. CIV. P. 23(a); see In re Initial Pub. Offering Sec. Litig., 471 F.3d 24, 32–33 (2d Cir. 2006).

143. FED. R. CIV. P. 23(b)(3); see, e.g., Schleicher v. Wendt, 618 F.3d 679, 681 (7th Cir. 2010) (ruling on a class certification motion filed pursuant to Rule 23(b)(3)).

144. FED. R. CIV. P. 23(b)(3); see In re IPO Sec. Litig., 471 F.3d at 32, 41–42 (reviewing the prerequisites to class certification and determining the standard that courts must use to determine whether a putative class satisfies each requirement of Rule 23).


147. See FED. R. CIV. P. 23; Falcon, 457 U.S. at 160–61.

148. See Schleicher, 618 F.3d at 686. Certification may put so much pressure on defendants that they may be willing to settle cases with unsubstantiated claims. See id.

class certification by arguing that reliance is essentially an individual issue that predominates over class-wide issues. In Basic, discussed later in this Note, the Court blessed the district court’s use of the FOTM theory, an application of the ECMH that posits that reliance on the integrity of the market price of a security creates a rebuttable presumption of reliance. This reshaping of common law reliance forever altered the legal landscape. The perceived flood of frivolous litigation following the landmark Basic decision prompted congressional action, resulting in the Private Securities Litigation Reform Act of 1995 (PSLRA). Though loss causation ultimately rests on the market’s response to information, the Supreme Court recently reaffirmed that reliance is distinct from loss causation. Following Halliburton, plaintiffs need not prove loss causation to obtain certification because it is a merits issue of class-wide proof. A more detailed review of Halliburton and the Supreme Court’s loss causation decisions follows.

II. THE SUPREME COURT CAUSATION TRILOGY: BASIC, DURA, AND HALLIBURTON

Part II focuses on the three Supreme Court decisions that have directly addressed loss causation. The Supreme Court embraced economic theory in Basic Inc. v. Levinson, and that decision effectively enabled modern securities class actions. Because the Court upheld a presumption of reliance based on FOTM, it made class actions much easier to maintain. Congress responded to perceived abuses by class action plaintiffs with the PSLRA, which codified loss causation, but provided very little guidance to the courts. As a result, courts took divergent approaches to loss causation, and the Supreme Court’s Dura Pharmaceuticals, Inc. v. Broudo decision resolved only some of those differences. Causation and damages are interlinked, and thus Part II briefly summarizes theories of damages following the discussion of Dura. Part II then concludes with a review of Erica P. John Fund, Inc. v. Halliburton Co., and the consequences of that decision.

151. Basic, 485 U.S. at 246–47; see infra Part II.A.
152. See Olazábal, supra note 4, at 347–48 (noting the frequency of frivolous class action lawsuits filed after Basic).
153. See infra Part II.B.
155. Halliburton, 131 S. Ct. at 2186.
156. See 485 U.S. 224 (1988); see also infra Part II.A.
A. Back to Basic: Fraud on the Market and the Rebuttable Presumption of Reliance

At common law, plaintiffs had to prove that they reasonably relied on a material misstatement that induced the fraudulent transaction. This element of proof—reliance—establishes a causal link between the misconduct and the disputed transaction. The courts integrated reliance into Rule 10b-5 claims arising from both face-to-face and open-market transactions. As the class action developed, some courts considered severing individual reliance issues, requiring separate trials for each class member. To avoid these costly endeavors, class action plaintiffs began advocating a form of reliance defined by reliance on the integrity of the market price, rather than actual reliance on a misstatement or omission. This theory became known as fraud on the market, and it applies the ECMH to posit that because “most publicly available information is reflected in market price, an investor’s reliance on any public material misrepresentations, therefore, may be presumed for purposes of a Rule 10b-5 action.”

Some courts endorsed FOTM and allowed plaintiffs to avoid the cumbersome process of individual proof of actual reliance. Over time, courts eased the reliance requirement, and widespread application of FOTM took hold by the early 1980s. Given FOTM’s perceived departure from the common law, defendants vigorously challenged its application. The theory reached the Supreme Court in 1988.

In its seminal holding, the Basic Court did not expressly adopt FOTM in Rule 10b-5 actions, but it permitted the lower courts to apply a presumption

158. See RESTATEMENT (SECOND) OF TORTS § 525 (1977). Reliance in FOTM cases is also known as transaction causation, and serves as the but for cause of the fraudulent transaction. See Dura, 544 U.S. at 341-42; supra Part I.B (distinguishing between different articulations of causation).


160. See id. at 243–44.

161. See Green v. Wolf Corp., 406 F.2d 291, 301 (2d Cir. 1968); 4 HAZEN, supra note 7, § 12.10[5], at 124 (noting the high costs of single-issue trials for each class member).

162. See Basic, 485 U.S. at 245; Fischel, supra note 117, at 908; supra Part I.D (discussing class actions).

163. Basic, 485 U.S. at 247; see also id. at 241–44; Fischel, supra note 117, at 908–11; Donald C. Langevoort, Basic at Twenty: Rethinking Fraud on the Market, 2009 Wis. L. Rev. 151, 153, 158–59 (characterizing Basic as a “profound” but “enigmatic” decision).

164. See, e.g., Blackie v. Barrack, 524 F.2d 891, 905–07 (9th Cir. 1975); Fischel, supra note 117, at 908.

165. See Basic, 485 U.S. at 250 & n.1 (White, J., concurring in part and dissenting in part); Affiliated Ute Citizens v. United States, 406 U.S. 128, 153–54 (1972) (holding that actual reliance is unnecessary and that reliance is presumed where an omission is material); Blackie, 524 F.2d at 905–06 (citing Affiliated Ute Citizens, 406 U.S. at 153–54). By the 1980s, ECMH had gained traction not only in law and economics, but the hypothesis also drove policy making. See Langevoort, supra note 163, at 158.

166. See Basic, 485 U.S. at 243 (majority opinion). But see Fischel, supra note 117, at 908 (noting that FOTM indicates the ultimate proof of objectively reasonable reliance, the judgment of a consensus of market makers about the value of a security).

of reliance to plaintiffs asserting FOTM.  In reaching this “common sense” decision, the Court noted the distinctions between face-to-face transactions and purchases and sales on the open market. In developed securities markets, a company’s stock price is determined by all available information. Individual investors do not engage in face-to-face negotiations with the culpable parties, but the information is still transmitted to the investor in the form of the stock price. Misleading statements defraud investors because investors rely on the market price of a security as an indicator of its true value. Under FOTM, reliance on the integrity of the market price establishes the requisite causal connection between the fraud and the purchase or sale of stock. Essentially, the market acts “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.” It follows that plaintiffs can be defrauded even if they are completely unaware of the misstatement.

The presumption of reliance established by FOTM typically has three elements. First, the misstatement must be material; second, the security must trade in an efficient market; and third, the misstatement must have been publicly disseminated. The link between the misrepresentation and the purchase price is not invariably strong, however, and defendants can rebut the presumption with “[a]ny showing that severs the link” between the

168. See id. at 241–42, 250 (“It is not inappropriate to apply a presumption of reliance supported by the fraud-on-the-market theory.”).
169. See id. at 242–44, 244 n.22, 246.
170. See id. at 241–42 (quoting Peil v. Speiser, 806 F.2d 1154, 1160–61 (3d Cir. 1986)); supra Part I.C.
172. See Basic, 485 U.S. at 241–44 (quoting Peil, 806 F.2d at 1160–61). To put it another way, the share price is an aggregation of the different evaluations of a stock’s value by different market participants. See id. at 244. The investor acts in reliance on the misstatement because the investor trusts that the stock is worth the market price. See id. at 244–45.
173. See id. at 241–42 (quoting Peil, 806 F.2d at 1160–61). This, of course, does not establish the causal connection between the misstatement and the loss. See supra Part I.B.
174. Basic, 485 U.S. at 244 (quoting In re LTV Sec. Litig., 88 F.R.D. 134, 143 (N.D. Tex. 1980)).
175. See Fischel, supra note 117, at 908.
176. See 4 HAZEN, supra note 7, § 12.10[6][A], at 130.
177. See Basic, 485 U.S. at 248 n.27; In re Salomon Analyst Metromedia Litig., 544 F.3d 474, 481 (2d Cir. 2008). Courts often cite the test set forth in Cammer v. Bloom to determine whether shares trade in an efficient market. 711 F. Supp. 1264 (D.N.J. 1989); see, e.g., In re DVI, Inc. Sec. Litig., 639 F.3d 623, 633 n.14 (3d Cir. 2011). The “Cammer factors” include the average weekly trading volume, the number of securities analysts reporting on the security, the extent to which market makers traded the security, the issuer’s eligibility to file an SEC registration Form S-3 (a registration form for seasoned reporting companies), and the cause-and-effect relationship between material disclosures and changes in the security’s price. Cammer, 711 F. Supp. at 1286–87.
misrepresentation and the price paid by the plaintiff. Defendants can rebut the presumption if the securities traded in an inefficient market. However, the presumption is extremely difficult to rebut for issuers whose securities are traded on national exchanges.

The Basic decision left some open questions. Among them, the Court did not adopt any rule establishing how quickly publicly-available information must be reflected in the market price. Justice White’s opinion criticized the plurality for applying an economic rationale at the cost of legal analysis, as well as for creating a presumption that is “virtually impossible” to rebut. Despite these concerns, the Basic decision revolutionized securities fraud. Not only did Basic’s tacit endorsement of FOTM permit the circuit courts to develop their own FOTM rules, it made aggregation of claims in the form of class actions much easier.

B. Legislative Reform: The PSLRA Codifies Causation

Following the Basic decision, and in response to growing concerns over the expanding use of the class action device, Congress enacted the PSLRA. The PSLRA represented the first substantial congressional reforms to the securities laws since the ’33 and ’34 Acts. Congress

178. Basic, 485 U.S. at 248.
179. See In re Initial Pub. Offering Sec. Litig., 471 F.3d 24, 42–43 (2d Cir. 2006) (holding that because initial public offerings are sold in an undeveloped market, it is therefore not efficient, and thus FOTM is not available); 4 HAZEN, supra note 7, § 12.10, at 135 (“It is axiomatic that the fraud-on-the-market presumption depends on the existence of an active market.”). See generally Matt Silverman, Note, Fraud Created the Market: Presuming Reliance in Rule 10b-5 Primary Securities Market Fraud Litigation, 79 FORDHAM L. REV. 1787 (2011), for an analysis of FOTM’s companion doctrine in primary markets.
180. See In re LTV Sec. Litig., 88 F.R.D. 134, 143 n.4 (N.D. Tex. 1980); cf. Basic, 485 U.S. at 252, 255–56, 256 n.7 (White, J., concurring in part and dissenting in part) (citing Blackie v. Barrack, 524 F.2d 891, 906–07 & n.22 (9th Cir. 1975)).
181. See Basic, 485 U.S. at 248 n.28 (majority opinion). The Supreme Court had the opportunity to address this issue in Apollo Group, Inc. v. Policemen’s Annuity & Benefit Fund, but denied certiorari. See 131 S. Ct. 1602 (2011). This Note discusses Apollo in Part III.E.
182. See Basic, 485 U.S. at 252, 255–56, 256 n.7 (White, J., concurring in part and dissenting in part).
183. See Basic, 485 U.S. at 244 (majority opinion); Fischel, supra note 117, at 907 (noting that FOTM “revolutionized” securities fraud); 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, 441 (1984) (a pre-Basic article indicating that individual reliance prohibited the use of the class action mechanism in Rule 10b-5 cases); Fisch, supra note 73, at 818–19; infra Part II.B (discussing Congress’s response to the proliferation of class actions following Basic).
185. Phillips & Miller, supra note 184, at 1009.
hoped the PSLRA would combat abusive techniques used by plaintiffs and their lawyers, including initiating “strike” suits coercing settlements with the threat of expensive discovery, and manipulation of class action plaintiffs by their attorneys. Congress sought to eliminate suits filed by the plaintiffs’ bar immediately after any significant drop in a company’s stock price, regardless of whether evidence of fraud existed. Among other reforms, the PSLRA placed restrictions on class representatives, attorney’s fees, and the scope of discovery. Importantly, the PSLRA requires that plaintiffs specify each misleading statement for which they seek relief, and it established a damages cap. To avoid providing successful plaintiffs with a windfall caused by market overreaction to bad news, the PSLRA caps damages to the difference between the sale price of the security and its mean trading price over the ninety days following the disclosure of the fraud.

In response to concerns that some courts adopted a presumption of loss causation, Congress codified the causation element as part of the PSLRA. Since the PSLRA, courts have used loss causation as a gatekeeping mechanism that restricts the flow of frivolous securities class actions. While Congress codified causation, the PSLRA did not indicate how parties could prove it. In the absence of legislative guidance, courts took charge of the matter.

---

186. A strike suit is an action “without reasonable grounds to believe it has merit.” Elliott J. Weiss & John S. Beckerman, Let the Money Do the Monitoring: How Institutional Investors Can Reduce Agency Costs in Securities Class Actions, 104 YALE L.J. 2053, 2085 (1995). A strike suit has a negative net present value, since the plaintiff cannot prevail on the merits. See id. at 2086.


189. See generally 4 Hazen, supra note 7, § 12.15[1] (summarizing the reforms implemented by the PSLRA).


194. 15 U.S.C. § 78u-4(b)(4) (“In any private action arising under this chapter, the plaintiff shall have the burden of proving that the act or omission of the defendant alleged to violate this chapter caused the loss for which the plaintiff seeks to recover damages.”); S. REP. NO. 104-98, at 13 (1995), reprinted in 1995 U.S.C.C.A.N. 679, 694 (noting that the plaintiffs bear the burden of proof of causation but defendant could prove that “factors unrelated to the fraud contributed to the loss”).

195. See Fisch, supra note 73, at 816, 825.

196. See Olazábal, supra note 4, at 348.
C. A Tangle of Causation: The Dura Decision

To resolve a split among circuits over pleading loss causation, the Supreme Court decided Dura.\footnote{544 U.S. 336 (2005).} The crux of the allegations concerned alleged misrepresentations by the defendant Dura Pharmaceuticals, Inc. regarding profits from drug sales, as well as the likelihood of Food and Drug Administration (FDA) approval of an asthmatic spray device.\footnote{See id. at 339.} Dura’s share price lost almost half its value when Dura announced lower than expected earnings.\footnote{Id.} The share price declined further when Dura later announced that the FDA would not approve its asthmatic spray device.\footnote{Id.} Despite these declines, the stock price recovered within a week of the final corrective disclosure.\footnote{Id.}

In the wake of the PSLRA’s codification of loss causation,\footnote{See supra Part II.B.} courts applied divergent pleading standards for loss causation.\footnote{See Thomas F. Gillespie, III, Dura Pharmaceuticals, Inc. v. Broudo: A Missed Opportunity to Right the Wrongs in the PSLRA and Rebalance the Private Rule 10b-5 Litigation Playing Field, 3 J. BUS. & TECH. L. 161, 167–68 (2008).} Some courts, including the Ninth Circuit, endorsed the “purchase price inflation” theory.\footnote{See, e.g., Broudo v. Dura Pharm., Inc., 339 F.3d 933, 938 (9th Cir. 2003), rev’d, 544 U.S. 336.} Purchase price inflation posits that plaintiffs suffer their loss when they purchase securities inflated by misrepresentation, rather than when the concealed fraud materializes and the stock suffers a coordinate price drop.\footnote{See Dura, 544 U.S. at 338.}

The Supreme Court rejected this theory of causation and loss.\footnote{See id. at 342 (“[A]s a matter of pure logic, at the moment the transaction takes place, the plaintiff has suffered no loss; the inflated purchase payment is offset by ownership of a share that at that instant possesses equivalent value.”).} Beginning with an analysis of proof of causation in common law fraud actions, the Court cited authority focusing on traditional reliance actions, rather than FOTM cases.\footnote{See Fox, supra note 20, at 865 (“[T]he common law cases on causation provide very little meaningful guidance to the question before the Court.”).} The Court suggested that while an artificially inflated share price is necessary to plead loss causation, it is not sufficient—an inflated purchase price might, but it does not always, cause economic loss.\footnote{See Dura, 544 U.S. at 342.} According to the Court, a purchaser of an artificially inflated security has suffered no loss at the moment of purchase; the shareholder could simply resell the security at the purchase price on the market, or even profit from a sale of the security before the fraud is revealed.\footnote{See id. at 342–43 (“[I]f, say, the purchaser sells the shares quickly before the relevant truth begins to leak out, the misrepresentation will not have led to any loss.”).}
any loss.\textsuperscript{210} Under the ECMH, as soon as the market is aware of the fraud, inflation dissipates, depressing the market price to the value of the security absent the fraud—in other words, the stock reaches its true value.\textsuperscript{211} Thus, under the Ninth Circuit’s approach, a purchaser who bought artificially inflated shares could sell the shares prior to the disclosure of the truth, yet still recover damages in subsequent litigation.\textsuperscript{212} The purchase price inflation theory failed because it does not sufficiently allege either causation or loss.\textsuperscript{213} To buttress its holding, the Court emphatically noted that Rule 10b-5 suits exist “not to provide investors with broad insurance against market losses, but to protect them against those economic losses that misrepresentations actually cause.”\textsuperscript{214}

To reach this decision, the \textit{Dura} Court noted that it must be the misrepresentation that causes the loss, rather than some other of the “tangle of factors” affecting share price.\textsuperscript{215} Changing market conditions, industry downturns, or company-specific factors unrelated to fraud could cause a drop in share price.\textsuperscript{216} While \textit{Dura} expressly requires plaintiffs to prove the effect of the misstatements on the value of the security as a whole, the decision did not guide the lower courts on issues of proof.\textsuperscript{217} This led to the current loss causation climate involving hotly-litigated evidentiary issues.\textsuperscript{218} Before considering the byzantine methods of proof of loss causation, it is important to understand the types of damages that informed the \textit{Dura} decision.

\textbf{D. No Harm, No Foul: A Brief Note on Dura and Types of Damages}

Given the relative few securities class actions to proceed to the liability stage,\textsuperscript{219} authority on damages is both inconsistent and problematic.\textsuperscript{220} At
common law, courts often awarded rescissory damages for face-to-face transactions, but modern courts soon realized that contract remedies were inappropriate for litigation arising from open-market transactions. Most courts adopted an out-of-pocket remedy. Out-of-pocket losses equal the difference between the price paid or received for the security, and the actual value of the security if it were not artificially inflated by fraud. Under this theory of damages, an investor with a positive net recovery on the transaction is not entitled to any later recovery. Thus, if a security appreciates following the revelation of a misrepresented fact, a purchaser could not recover even though the investment is worth less than it would have been absent the fraud.

Dura requires plaintiffs to tie their losses to the defendant’s misrepresentation. Loss causation should therefore subject defendants only to actual, compensable injuries, thus serving the deterrent function of private remedies. Since unpredictable damages undermine deterrence, out-of-pocket recovery bolsters a class action’s ability to deter fraud. Furthermore, some commentators note that the out-of-pocket rule is the only measure of damages consistent with the common law, the loss causation requirement, and the PSLRA.

---

220. See Burch, supra note 15, at 349, 353, 355 (calling for an out-of-pocket measure of damages and noting that “no coherent doctrinal statement exists for calculating open-market damages in Rule 10b-5 securities fraud class actions”); see also Hazen, supra note 7, § 12.12[A], at 179 (noting that the current state of the law is “difficult” because most litigation does not proceed to a final judgment). The PSLRA’s framers also found this issue difficult. See S. Rep. No. 104-98, at 19 (1995), reprinted in 1995 U.S.C.C.A.N. 679, 698 (“The current method of calculating damages in 1934 Act securities fraud cases is complex, with no statutory guidance to provide certainty.”).

221. See Burch, supra note 15, at 363. In face-to-face transactions, courts sometimes applied the “benefit-of-the-bargain” rule based in contract law, where the aggrieved party could recover expectation damages, defined as the amount the plaintiffs would have received, including profits, if the defendant had performed. See id. at 365.

222. See id. at 362–64.

223. See id. at 359, 362–64.

224. See id. at 364 & nn.78–79. This measure assumes that the investor held the security through the final corrective disclosure of the class period. See id.

225. See id. at 364–65.

226. See id. However, in dicta, Dura did not proscribe recovery under this hypothetical set of facts. See Dura Pharm., Inc. v. Broduo, 544 U.S. 336, 343 (2005); Burch, supra note 15, at 360 (noting the problem of corporations bundling good and bad news to prevent share price decline); Fox, supra note 20, at 846–57 (describing hypothetical damages scenarios that Dura did not address). This issue is still unsettled. See Fox, supra note 20, at 847.

227. See Burch, supra note 15, at 386; supra Part II.C (discussing the Dura holding).

228. See id. at 386.

229. See id. at 394.

230. See id.

231. See id. at 396; see also 15 U.S.C. § 78bb(a) (2006) (limiting damages to actual damages caused by the fraud). As one of the PSLRA’s reforms, damages were limited to the difference between the sale price of the security and the mean trading price in the ninety days following the disclosure correcting the misstatement. See Burch, supra note 15, at 356–57. This is known as the “bounce-back” provision. See Robert A. Fumerton, Market Overreaction and Loss Causation, 62 Bus. Law. 89, 90 (2006). One commentator notes that market overreaction can occur not only after the final corrective disclosure of a class period, but to all corrective disclosures made across a class period. See id. at 92.
Even if out-of-pocket damages are the standard rule in most securities class actions, there is no uniform model for proving those losses.\(^\text{232}\) Damages assessments require expert testimony opining on what a security would have been worth had it not been tainted by fraud.\(^\text{233}\) Expert inflation models project per-share damages across the length of the class period.\(^\text{234}\) Perhaps because of the difficulties in ascertaining out-of-pocket loss, courts often hold that while damages cannot be speculative, they “need not be calculated with mathematical precision.”\(^\text{235}\) This Note argues that damages should be calculated with greater precision given their inextricability from causation.\(^\text{236}\)

**E. A Merits Issue: Halliburton’s Impact on Proof of Loss Causation**

The Supreme Court decided *Halliburton* in June 2011.\(^\text{237}\) The plaintiffs alleged that the defendant Halliburton Co. made misstatements concerning its expected liability in asbestos litigation, its anticipated revenues, and the potential benefits of a merger.\(^\text{238}\) The decision reversed a line of cases from the Fifth Circuit that required plaintiffs to prove loss causation to obtain the presumption of reliance, and therefore class certification.\(^\text{239}\)

The Fifth Circuit’s cases illustrate the intersection of reliance and loss causation. In *Halliburton*, the district court declined to certify a class because the plaintiffs could not demonstrate loss causation by a preponderance of the evidence.\(^\text{240}\) For class certification purposes, plaintiffs in the Fifth Circuit could show either an increase in the stock price after the release of false news, or demonstrate a decrease in price following a corrective disclosure.\(^\text{241}\) The plaintiffs did not argue that any of the misstatements caused inflation, and the lower court rejected the plaintiffs’ claims that the purported corrective disclosures tied to any fraud, thus defeating the requisite causal connection.\(^\text{242}\) The Fifth Circuit affirmed.\(^\text{243}\)

The Supreme Court rejected the Fifth Circuit’s apparent conflation of loss causation and reliance.\(^\text{244}\) The Court carefully distinguished loss

\(^\text{232}\) See Burch, supra note 15, at 390.

\(^\text{233}\) See id. at 389–90.

\(^\text{234}\) See infra Part III.B.


\(^\text{236}\) See infra Part IV.

\(^\text{237}\) 131 S. Ct. 2179 (2011).

\(^\text{238}\) Id. at 2183.

\(^\text{239}\) See, e.g., Oscar Private Equity Invs. v. Allegiance Telecom, Inc., 487 F.3d 261 (5th Cir. 2007), abrogated by Halliburton, 131 S. Ct. 2179.

\(^\text{240}\) Halliburton, 131 S. Ct. at 2183–84.


\(^\text{242}\) See id. at *4, *5–20.

\(^\text{243}\) 597 F.3d 330.

\(^\text{244}\) See Halliburton, 131 S. Ct. 2179, 2185–87.
causation from reliance, noting that reliance is a distinct element of proof that is “focused on facts surrounding the investor’s decision to engage in the transaction.”245 Loss causation is conceptually distinct because it “requires a plaintiff to show that a misrepresentation that affected the integrity of the market price also caused a subsequent economic loss,” rather than just a distortion at the time of the transaction.246

On appeal, Halliburton argued that some of the alleged misstatements did not result in a change in the market price of the defendant’s securities.247 In other words, the market did not react to Halliburton’s false statements.248 A lack of price impact of an alleged misstatement can be attributed to several factors: that the statement is immaterial, or that the securities are traded in an inefficient market.249 Where there is no price impact, it follows that there is no loss causation.250 Halliburton argued that this lack of price impact defeated reliance as well.251 Halliburton based this on the rationale that if the market price of a security reflects all public information, and that reliance is based on the integrity of the market, there can be no reliance on statements that do not impact the market price of securities.252 The Supreme Court did not address this argument because the Fifth Circuit clearly held that putative classes must prove loss causation—not reliance—to obtain certification.253

For purposes of this Note, the Supreme Court’s decision was most notable because it roundly affirmed loss causation’s role as a merits issue that, when disputed, must be decided at trial.254 In Part III, this Note considers the evidence that parties use to prove loss causation. These methods are based on the application of the ECMH to statistical regression analyses. Juries have misapplied these models in several recent trials.

III. THE EVIDENCE: HOW DO YOU PROVE LOSS CAUSATION AT TRIAL?

Part III considers the evidentiary aspects of loss causation. Expert witnesses must carefully parse the disclosures that substantiate plaintiffs’

245. Id. at 2186.
246. Id.
247. See id. at 2187.
248. See id.
249. See In re Salomon Analyst Metromedia Litig., 544 F.3d 474, 481–83 (2d Cir. 2008); Oscar Private Equity Invs. v. Allegiance Telecom, Inc., 487 F.3d 261, 269 (5th Cir. 2007), abrogated by Halliburton, 131 S. Ct. 2179.
250. See Halliburton, 131 S. Ct. at 2186.
251. See id. at 2186–87.
253. See Halliburton, 131 S. Ct. at 2187 (noting that although the Fifth Circuit’s opinion “may include some language consistent with a ‘price impact’ approach . . . we simply cannot ignore the Court of Appeals’ repeated and explicit references to ‘loss causation’

254. See id. at 2183.
claims of price distortion and dissipation. This part first reviews the basic statistical principles underlying event studies. These event studies isolate the impact of disclosure on the market price of securities, yielding measures of damages. Experts sometimes extrapolate these models backwards to calculate damages on each day of class periods. Part III then considers some common theories of causation that identify the mechanisms for disclosure of the concealed fraud. These models are complicated when experts link specific misstatements to inflation; many cases concern hundreds of alleged misstatements. Litigants in several recent trials used comparable causation models, and the juries’ application of those models ran afoul of \textit{Dura}. This part concludes with an exploration of those trials.

\textbf{A. The Event Study: Making Sense of the “Tangle of Factors”}

\textit{Dura} was a narrow decision that rejected the purchase price inflation theory of pleading,\footnote{See Fox, supra note 20, at 846 (noting that the decision was “extremely narrow” and that \textit{Dura} simply rejected the theory that an investor suffers a loss at the time of purchase); \textit{see also In re Initial Pub. Offering Sec. Litig.}, 399 F. Supp. 2d 261, 265 n.23 (S.D.N.Y. 2005) (noting that \textit{Dura} did not define an appropriate pleading standard; rather, it simply rejected the Ninth Circuit’s “overly permissive” standard).} \footnote{See supra note 116 and accompanying text (citing circuit decisions applying \textit{Dura}).} But courts apply the decision at later procedural stages.\footnote{See supra note 116 and accompanying text (citing circuit decisions applying \textit{Dura}).} Many courts require experts to conduct event studies, which isolate the effect of company-specific news from market-wide factors.\footnote{See, e.g., \textit{In re BankAtlantic Bancorp, Inc. Sec. Litig.}, No. 07-61542-CIV, 2011 WL 1585605, at *21 (S.D. Fla. Apr. 25, 2011).} In the context of securities litigation, an event study is traditionally defined as a statistical regression analysis that determines the effect of an event on the market price of a security.\footnote{See Michael J. Kaufman & John M. Wunderlich, \textit{Regressing: The Troubling Dispositive Role of Event Studies in Securities Fraud Litigation}, 15 STAN. J.L. BUS. & FIN. 183, 186–87 (2009).} An event study answers one critical question: what would the market price of a stock be but for the fraud that distorted its value?\footnote{See Linda Allen, \textit{Meeting Daubert Standards in Calculating Damages for Shareholder Class Action Litigation}, 62 BUS. LAW. 955, 957 (2007).} The reliability of the event study, which interlinks materiality, reliance, loss causation, and damages, is perhaps the overriding evidentiary issue in securities fraud actions.\footnote{See Kaufman & Wunderlich, supra note 258, at 187 (suggesting that event studies have become an independent, essential element of a securities fraud claim).} The event study is predicated on efficient capital markets, because a security’s market price incorporates all public information.\footnote{See id. at 190.} Given its essential role in these cases, the event study cannot be based on “junk science.”\footnote{Of course, expert testimony must satisfy the Federal Rules of Evidence and the Supreme Court’s test for admissibility of expert testimony set forth in \textit{Daubert v. Merrell Dow Pharmaceuticals, Inc.}, 509 U.S. 579 (1993). Before a court admits expert testimony, it must consider, among other things, whether the techniques used by the expert have been tested, have been subject to peer review, whether the technique has a potential rate of error, and whether the scientific community has generally accepted the technique. See \textit{Daubert}, 509 U.S. at 592–95; \textit{see also} Kaufman & Wunderlich, supra note 258, at 189–90.}
To prepare an event study, experts must first identify the instances that led the market to change its expectations about the value of a company’s stock. These “events” include the fraudulent statements themselves, and the disclosure that first reveals the truth of the fraud to the market. These misstatements inflate the share price, but inflation dissipates once the market becomes aware of the truth of the concealed fraud.

Experts next select the “event window,” the interval over which the expert calculates stock price movements. Stock prices may not respond to an event instantaneously, because sometimes the market gradually comes to terms with the new information; experts often limit the window to the day of the event, but windows sometimes extend over longer intervals. While longer windows may incorporate the full market response to the event, they may also incorporate unrelated factors. Importantly, where multiple events occur rapidly, longer windows may distort the analysis. Therefore, to achieve an optimal estimate of inflation, experts should restrict the event window if multiple disclosures occur over a short period.

To ascertain the true value of the stock, the expert must isolate the effect of the fraud on the share price from other unrelated factors that affect a security’s market value. These factors include market-wide, industry-wide, and company-specific factors unrelated to fraud. Unrelated events in the “tangle” of factors affecting share price are known as confounding events. To isolate the effect of the event, the expert examines the

---

263. See Kaufman & Wunderlich, supra note 258, at 191. Often, plaintiffs’ lawyers select these events. See id. at 191 n.27.

264. See id. at 191; Allen, supra note 259, at 958 (noting that selection of events is perhaps the most important component of an event study). The “announcement date” must be identifiable; the market cannot have anticipated it. See Kaufman & Wunderlich, supra note 258, at 191–92. These announcements can take several forms. See infra Part III.C (discussing corrective disclosures, leakage, and materialization of the risk theories).

265. See Kaufman & Wunderlich, supra note 258, at 191; infra note 302.

266. See id.

267. See id. at 195 (noting that where information is gradually leaked, the market may take more time to respond, justifying a longer window); see also Kaufman & Wunderlich, supra note 258, at 191 & n.30. Though the markets typically take a day to respond, experts often use a three-day event window to account for the difficulties associated with gradual leakage of the information to the public. See Kaufman & Wunderlich, supra note 258, at 192; Allen, supra note 259, at 958.

268. See id. (“Intuitively, one cannot disentangle the abnormal return associated with a single event when there are several announcements within the same event window. That is, the stock price does not have sufficient time between announcements to return to ‘normal’ so as to form a baseline for the subsequent event.”).

269. See Kaufman & Wunderlich, supra note 258, at 192–93, 198.

270. See id. at 192–93.

271. See Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 342–43 (2005); Kaufman & Wunderlich, supra note 258, at 231; see also In re Vivendi Universal, S.A. Sec. Litig., 634 F. Supp. 2d 352, 364 (S.D.N.Y. 2009) (citing Robbins v. Koger Props., Inc., 116 F.3d 1441, 1447 (11th Cir. 1997)) (noting that distinguishing share price declines caused by extraneous factors from those caused by a corrective disclosure is generally the province of an expert).
relationship of the stock price movement of the company to the movement of a market or industry index over a specified length of time. Experts select an appropriate market model, such as the capital asset pricing model, to determine the security’s sensitivity to overall market-wide moves over non-event periods. This determines the stock’s volatility—its sensitivity to general market conditions. Expert then apply the model over the event window to determine the “normal” return that would have prevailed absent the event. This isolates the effect of the event from other market-wide and industry-wide changes.

If there is any remaining price movement, it is considered “abnormal”; abnormal return is the difference between the actual return controlled for market and industry movement, and the normal return. If the abnormal return is high enough, it is likely statistically significant. In effect, the analysis measures the amount of inflation or deflation in a security’s market price on any given day.

Courts exclude flawed event studies, including those that fail to disaggregate company-specific, non-fraud related news. This scenario often occurs where multiple disclosures of bad news are made on the same day. Confounding events are only some of the difficulties that enter an expert’s analysis of the causal effect of “truth” entering the market. To prepare the event study, an expert must identify events by considering the mechanisms that reveal the concealed risks to the market. Though experts do not prepare event studies for every day of class periods, event studies form the basis for damages assessments, which measure the per-share dollar value of inflation. The next section of this Note summarizes some common methodologies for calculating inflation and damages.

275. See Kaufman & Wunderlich, supra note 258, at 193. This is called “running a regression”; the period of time is often similar in length to the event window. See id.


277. See Allen, supra note 259, at 957.

278. See id.

279. See Kaufman & Wunderlich, supra note 258, at 192–93.

280. See Allen, supra note 259, at 957.

281. See Kaufman & Wunderlich, supra note 258, at 192–93. Abnormal returns must be statistically significant to account for chance price movement. Id.


283. See Kaufman & Wunderlich, supra note 258, at 208–10 & nn.154 & 157 (noting that a faulty event study can prevent class certification and that a proper event study considers materiality and market efficiency, in addition to loss causation and damages); see also infra note 337 and accompanying text.

284. Kaufman and Wunderlich argue that requiring an event study is unconstitutional and inconsistent with the securities laws; since determining the credibility of experts is a quintessential issue of fact, the judge “usurps” the jury’s role by removing competing expert testimony from jury consideration. See generally Kaufman & Wunderlich, supra note 258, at 220–60.

285. See infra Part III.C.
B. Where the Money Is: Damages & Inflation Methodologies

Experts often opine on per-share damages to the class. Damages analyses in securities fraud claims typically begin with the event study detailing the “true” price of a security—that is, measuring the value of the security absent the alleged fraud. The event study measures inflation and dissipation on statistically significant abnormal returns. Based on the abnormal returns, an expert determines artificial inflation, then “backcasts” the inflation using one of three common approaches to establish a value line measuring damages over each day of the class period. These approaches are known as the index method, the constant percentage method, and the constant dollar method, and they purport to identify the true value of the share on any given day in the class period, at least for purposes of measuring damages.

According to the index method, the company’s share price rises and falls in proportion to an established market index. If, for example, the Dow Jones Industrial Average fell 10 percent over the course of the class period, the “true” price of the company’s shares would have fallen at that same rate.

The constant percentage method assumes that inflation does not vary unless the company makes additional misstatements. An expert “backcasts” from the final market price, and sets the amount of inflation as an unchanging percentage of the share price after the final corrective disclosure.

286. See Tabak, supra note 22, at 1.
287. See id. at 1; supra Part III.A. These methodologies are most useful for settlement purposes; juries in recent trials have made findings of fact of share price inflation on a daily basis. See In re Flag Telecom Holdings, Ltd. Sec. Litig., No. 02-CV-3400, 2010 WL 4537550, at *20 n.18 (S.D.N.Y. Nov. 8, 2010); infra Part III.E.
288. See supra note 258 and accompanying text.
289. See Tabak, supra note 22, at 1.
290. See id.; Jeff G. Hammel & B. John Casey, Sizing Securities Fraud Damages: ‘Constant Percentage’ on Way Out?, N.Y. L.J., Jan. 21, 2009, at 4; see also William O. Fisher, Does the Efficient Market Theory Help Us Do Justice in a Time of Madness?, 54 Emory L.J. 843, 877 & n.97 (2005). Each of these models assumes that after the final corrective disclosure of the event study, the actual price and true price are equivalent; that is, inflation in the share price goes to zero. See Tabak, supra note 22, at 1–2.
291. See Tabak, supra note 22, at 1–2; see also Hammel & Casey, supra note 290.
292. See Tabak, supra note 22, at 2 (conducting similar calculations based on the S&P 500 index). Thus, if the index fell 10 percent over the class period, and if a share is worth $20 following the misstatement, $12 on the day before the truth hits the market, and the value of the stock is $9 following the corrective disclosure, the “true” price at the start of the class period would be $10. See id. Therefore, damages would equal the original market price, $20, minus $10. Id. This example is grossly oversimplified, since it accounts for a class period with only one misrepresentation, a paradigmatic corrective disclosure, and no confounding events. See id.; supra Part III.A.
293. See Tabak, supra note 22, at 2.
294. See id. If the actual stock price is $9 at the end of the class period, it fell 25 percent from the pre-corrective price of $12. See id. This percentage is constant throughout the entire post-misrepresentation period, so under the constant percentage method, damages equal 25 percent of the $20 initial share price, or $5, for class members who purchased on the day of the misrepresentation. See id.
Under the constant dollar method, the price drop at the end of the class period represents the uniform amount of dollar inflation following the most recent misstatement. Under this method, the dollar value of inflation remains constant over the period between misstatements and corrective disclosures.

These three methods yield three different results, and when spread over multiple misstatements in longer class periods, experts’ analyses can possibly overstate or understate damages depending solely on the choice of methodology. One commentator notes that, post-Dura, only the constant dollar method is legally tenable. Perhaps because these methods of calculating damages do not produce uniform results, courts in recent trials required the juries to determine damages for each day of lengthy class periods. Identifying the mechanism that reveals the truth of the fraud to the market complicates damages further.

C. Coming Clean: Disclosure Mechanisms

An event study determines the amount of inflation and deflation in the period surrounding a misstatement, as well as when its truth is revealed to the public. Statistical events do not easily correlate to real-world events; the truth of a concealed fraud may enter the market through various mechanisms. While the means of dissipation are not necessarily foreseeable, dissipation itself is an inevitable consequence. In other words, the market will always learn the truth. After Dura, disclosure mechanisms triggering dissipation warranted intense judicial scrutiny.

1. The Corrective Disclosure

Dura’s requirement that a stock price show decline after the truth of the fraud hits the market is heavily litigated. Plaintiffs often satisfy this

295. See id. at 3.
296. See id. In this hypothetical, the difference between the actual price prior to the corrective disclosure and the price after is $3.
297. See id. at 3; Hammel & Casey, supra note 290, at 7 (suggesting that the constant percentage method does not satisfy Dura, since it potentially allows purchasers to recover for share price declines caused by factors other than fraud). The In re Williams Sec. Litig.-WCG Subclass district court rejected the constant percentage model. 558 F.3d 1130, 1134 n.2 (10th Cir. 2009); see also In re Flag Telecom Holdings, Ltd. Sec. Litig., No. 02-CV-3400, 2010 WL 4537550, at *20 (S.D.N.Y. Nov. 8, 2010) (“More aggressive methods of calculation could result in damages ranging from approximately $25 million to approximately $120 million.”).
299. See infra Part III.E.
300. See supra Part III.A.
301. See Thorsen et al., supra note 70, at 101.
302. See id.
303. See id.
304. See id. at 119 (advocating a broad standard for loss causation and noting that courts have identified various definitions of “truth” on the market and adopted per se rules excluding any losses incurred before the truth is revealed).
305. See id.; Pietrzak & McLaughlin, supra note 23.
requirement by alleging a “corrective disclosure,” a public statement that reveals some previously concealed fact.\textsuperscript{306} The classic corrective disclosure occurs when defendants make a material misstatement, conceal it, and then publicly reveal the full scope of their fraud.\textsuperscript{307} Corporate press releases, market analyst reports,\textsuperscript{308} ratings downgrades, and newspaper publications can serve this role,\textsuperscript{309} though \textit{Dura} did not specify a standard for identifying corrective disclosures.\textsuperscript{310} A corrective disclosure is often identified by a dramatic drop in stock price immediately following a disclosure,\textsuperscript{311} because all share price inflation dissipates once the market learns the whole truth.\textsuperscript{312} The Tenth Circuit’s decision in \textit{In re Williams Securities Litigation-WCG Subclass} illustrates the court’s reluctance to allow claims to survive summary judgment where an expert fails to select events properly.\textsuperscript{313} In that decision, the court expressed skepticism that the plaintiffs could prepare a complaint on the very day of the first corrective disclosure if the public was not already aware of those facts.\textsuperscript{314}

The next section considers when the truth of previously concealed frauds does not enter the market through a paradigmatic corrective disclosure. Rather, the market sometimes absorbs information in pieces, if frauds are slowly or partially revealed.

2. Indirect or Partial Disclosure: Materialization of the Risk and “Leakage”

The lack of a specific corrective disclosure is not fatal to proof of loss causation.\textsuperscript{315} Plaintiffs often argue that a risk materialized through

\begin{itemize}
\item \textsuperscript{306} See Thorsen, supra note 70, at 101.
\item \textsuperscript{307} See id.
\item \textsuperscript{309} Courts differ in their characterizations of what types of disclosures constitute a corrective disclosure. See \textit{In re Vivendi Universal, S.A. Sec. Litig.}, 634 F. Supp. 2d 352, 363 n.9 (S.D.N.Y. 2009) (noting that the paradigmatic corrective disclosure comes from the issuer itself). Corrective disclosures are sometimes placed in a separate conceptual category from “materialization of the risk.” See id. at 363 n.9, 366; see also \textit{In re Bristol-Myers Squibb Co. Sec. Litig.}, 586 F. Supp. 2d 148, 164–65 (S.D.N.Y. 2008) (noting that corrective disclosures include all possible loss-inducing events). Other courts apparently disregard this distinction. See Schleicher v. Wendt, 618 F.3d 679, 683 (7th Cir. 2010) (noting that materialization of the risk “is not a legal doctrine or anything special as a matter of fact”).
\item \textsuperscript{310} See Fox, supra note 20, at 865–66.
\item \textsuperscript{311} See Thorsen et al., supra note 70, at 101.
\item \textsuperscript{312} See id.
\item \textsuperscript{313} 558 F.3d 1130 (10th Cir. 2009). The case concerned the stock price of the issuer, WCG. The market price had declined steadily, but coincided with the industry-wide market for telecommunications stocks. See id. at 1132–34.
\item \textsuperscript{314} \textit{Id.} at 1141. Consistent with ECMH, courts have rejected particular disclosures that did not really include new information. See supra note 308 and accompanying text.
\item \textsuperscript{315} See Thorsen et al., supra note 70, at 102–03.
\end{itemize}
staggered or partial disclosures; when “the alleged misstatement conceals a condition or event which then occurs and causes the plaintiff’s loss, it is the materialization of the undisclosed condition or event that causes the loss.”

This risk could materialize through adverse events other than—or in addition to—corrective disclosures, including partial revelations of wrongdoing. Even if inflation dissipates gradually over a longer time period, an investor is still damaged because he cannot recover the full amount of inflation reflected in the security at the time of purchase. Thus, some argue that the gradual dissipation of inflation through a “growing quiet awareness” of the fraud is a theory that warrants recovery.

For example, plaintiffs have argued that concealed risks materialize when a company announced poor financial results that are alleged to reveal the company’s “true financial condition.” The In re Williams court required the plaintiffs’ expert to establish proof of the mechanism by which the risk materialized, and ultimately rejected this loss causation model. As the district court noted, materialization of the risk is a theory of proof, “not an excuse for lack of evidence of loss causation.” An expert must identify when the materialization of the concealed risk occurred, and link that materialization to the corresponding loss. Commentators note that where

316. See id.; see also In re Vivendi Universal, S.A. Sec. Litig., 634 F. Supp. 2d 352, 364 (S.D.N.Y. 2009).
317. See In re Initial Pub. Offering Sec. Litig., 399 F. Supp. 2d 298, 307 (S.D.N.Y. 2005) (“By contrast, where the alleged misstatement is an intentionally false opinion, the market will not respond to the truth until the falsity is revealed—i.e. a corrective disclosure.”).
318. See Thorsen et al., supra note 70, at 102–03 (noting that when journalists or analysts remark on a corporation’s improprieties, the facts underlying these disclosures may fall within a scheme of greater wrongdoing). Events such as earnings restatements or warnings could substantiate this theory of loss causation. See id. at 102.
319. See id. at 103.
320. See Fox, supra note 20, at 851; Thorsen et al., supra note 70, at 103.
321. See Thorsen et al., supra note 70, at 102; see also In re Williams Sec. Litig.-WCG Subclass, 558 F.3d 1130, 1134–35 (10th Cir. 2009). In In re Williams, the plaintiffs’ expert attributed 98 percent of the value of the stock to the concealed fraud, and that the truth of the company’s poor financial health was revealed to the market through “leakage.” Id. at 1134–35.
322. The court held:

A plaintiff cannot simply state that the market had learned the truth by a certain date and, because the learning was a gradual process, attribute all prior losses to the revelation of the fraud. The inability to point to a single corrective disclosure does not relieve the plaintiff of showing how the truth was revealed; he cannot say, “Well, the market must have known.”

558 F.3d at 1138. Because the plaintiffs’ expert alleged that a trickle of information entered into the marketplace over a nineteen-month period, the court quoted Dura for the proposition that “[o]ther things being equal, the longer the time between the purchase and sale, the more likely that . . . other factors caused the loss.” Id. at 1139 (quoting Dura, 544 U.S. at 343).
323. In re Williams Sec. Litig., 496 F. Supp. 2d 1195, 1265 (N.D. Okla. 2007), aff’d, 558 F.3d 1130 (10th Cir. 2009).
324. The court also rejected bankruptcy as a corrective disclosure, since the zone of risk within the misrepresentation “is not infinite.” In re Williams, 558 F.3d at 1142–43 (“[T]here are simply too many potential intervening causes to say that bankruptcy was WCG’s legally foreseeable destiny such that its trading price at bankruptcy equaled its true value . . . .”). Sometimes, corporations reveal bundles of negative news on the same day. Courts reject
a stock price declines gradually over a long period, a leakage theory might enable plaintiffs to claim damages each day the stock price declined, since they need not establish a concrete mechanism for market realization of the truth. Crafting a theory of causation becomes extremely difficult over long class periods with many alleged misstatements.

D. A Morass of Misstatements: Linking Damages Models to Specific Misrepresentations

Class action plaintiffs often allege many fraudulent statements over long class periods. Multiple corrective disclosures complicate these allegations, with inflation increasing after some misstatements, remaining constant after others, and then gradually decreasing. Calculations of inflation are further complicated by different theories of disclosure for multiple misstatements. Naturally, a jury can rule in either the defendants’ or the plaintiffs’ favor for each misstatement. An expert’s carefully constructed inflation model can be undermined if the jury finds that not all of the alleged misstatements are actionable. Hypothetically, the plaintiffs’ expert could opine that the defendant’s stock price was artificially inflated by the first misstatement, and a later misstatement additionally inflated the stock. If the jury rules in the defendants’ favor on one misstatement and in the plaintiffs’ favor on another, it is unclear whether the inflation attributed to the first misstatement is wiped out, or if the entire amount of inflation is transferred to the later misstatement. The few courts that have considered these issues have adopted a flexible approach deferential to the jury’s findings.

expert analysis that does not disaggregate the negative news related to the fraud from news unrelated to fraud. See In re BankAtlantic Bancorp. Sec. Litig., No. 07-61542-CIV, 2011 WL 1585605, at *21–22 (S.D. Fla. Apr. 25, 2011); see also infra note 337 and accompanying text.

325. Pietrzak & McLaughlin, supra note 23.

326. See infra Part III.D.


328. See supra Part III.A; infra Part III.E.

329. See supra Part III.C.


331. See id.

332. Id.

333. See In re Vivendi Universal, S.A. Sec. Litig., 765 F. Supp. 2d 512, 561 (S.D.N.Y. 2011) (citing Castillo v. Envoy Corp., 206 F.R.D. 464, 472 (M.D. Tenn. 2002)) (noting that where plaintiffs’ inflation band did not correspond directly to fifty-seven misstatements, “courts have suggested that a misstatement may cause inflation simply by maintaining existing market expectations, even if it does not actually cause the inflation in the stock price to increase on the day the statement is made”).
E. Lost at Sea? Three Recent Verdicts

Few securities class actions ever see trial, and even fewer reach a jury verdict. This Note focuses on three recent verdicts in securities class actions that have important loss causation implications. The federal courts have a long history of according great deference to jury verdicts, but these juries’ findings did not logically follow the parties’ evidence of causation and damages.

1. The Household Verdict

Beginning in August 2002, individual plaintiffs filed a series of complaints against Household International, Inc. and several of its officers, among others. Household was a publicly traded corporation in the business of consumer lending. Those complaints alleged that Household


335. These three verdicts could ultimately yield billions of dollars in damages. See Andrew M. Harris, HSBC Faces Fraud Trial over Predecessor’s Lending (Update2), BLOOMBERG (Mar. 30, 2009, 6:46 PM), http://www.bloomberg.com/apps/news?id=nXGHk_IncBoQ_supra note 26 and accompanying text.

336. See Tennant v. Peoria & Pekin Union Ry. Co., 321 U.S. 29, 35 (1944) (“Courts are not free to reweigh the evidence and set aside the jury verdict merely because the jury could have drawn different inferences or conclusions or because judges feel that other results are more reasonable.”); see also FED. R. CIV. P. 50; Harris v. Alabama, 513 U.S. 504, 518–19 (1995) (“A jury verdict expresses a collective judgment that we may fairly presume to reflect the considered view of the community.”) (Stevens, J., dissenting).

337. A fourth class action, In re BankAtlantic Bancorp. Securities Litigation, reached a jury verdict in November 2010, following four weeks of trial. No. 07-61542-CIV, 2011 WL 1585605, at *6 (S.D. Fla. Apr. 25, 2011). The jury found some defendants liable for some, but not all, of the alleged misstatements. See id. On April 25, 2011, the court vacated the verdict, holding that the plaintiffs failed to produce sufficient evidence at trial to prove loss causation. See id. at *14–22. The crux of the defendants’ post-trial arguments concerned testimony by the plaintiffs’ expert related to causation and damages. See id.; see also id. at *4 (quoting defendants’ argument that “[t]his is a case based on [the plaintiffs’ expert’s] broad-brush assumptions”). The plaintiffs proceeded on a materialization-of-the-risk theory, and the jury found for liability on one of two possible damages periods. See id. at *6, *15–16. The verdict—and therefore the court’s resolution of the defendants’ post-trial motion—“hinged” on the jury’s finding regarding the release of a bundle of negative information on the materialization date. Id. at *18–19. However, that negative information pertained to both fraud-related and non-fraudulent conduct. Id. at *18. At trial, the plaintiffs’ expert “freely admitted” that she assumed that the entire negative bundle related to the fraud. Id. at *19. She did not disaggregate the effect of the negative fraud-related information from the effect of the non-fraudulent information. Id. Because the jury rejected the plaintiffs’ assumption, its findings were necessarily fatal to proof of causation, and the court vacated the jury’s findings of liability for this period of damages. See id. at *21. Though this decision articulated some of the problems with proof of causation, this Note focuses on three other verdicts. In those three verdicts, juries applied causation models over longer time periods, decided many more misstatements than those at issue in In re BankAtlantic, or made findings of fact utterly inconsistent with the economic theory supporting the courts’ causation and damages jurisprudence.


339. See id. at *2.
violated the federal securities laws by failing to report that it manipulated delinquent loans to appear solvent, and that it engaged in predatory lending.340 After Household’s auditors recommended that it significantly restate its earnings, and news of a possible state class action settlement became public, the plaintiffs filed suit.341 The court certified the class in 2004342 and the matter ultimately went to trial.

On May 7, 2009, the jury returned a mixed verdict in favor of the plaintiffs.343 The jury found Household liable for seventeen of a total of forty alleged misstatements, exonerating all the defendants on the first thirteen misstatements and deciding per-day, per-share dollar inflation for each day of the class period.344 Loss causation was a heavily litigated issue in the case, and it featured prominently in the parties’ post-trial submissions.345

After the verdict, Household moved for judgment as a matter of law.346 The verdict form required the jury to select a model of loss causation proffered by the plaintiffs’ expert that “reasonably estimate[d]” damages, if it found the defendants liable for any of the misstatements.347 The jury selected the leakage model,348 and found no share price inflation until the date of the first misstatement for which they determined the defendants liable, March 23, 2001.349 On that date, however, the jury attributed the

---

340. See id.
341. See id.
343. See Verdict Form, Lawrence E. Jaffe Pension Plan v. Household Int’l, Inc., No. 02 Civ. 5893 (N.D. Ill. May 7, 2009), ECF No. 1611 [hereinafter Household Verdict Form]; LaCroix, supra note 26. This trial was only the seventh securities class action based on post-PSLRA conduct to reach a verdict. See Savett, supra note 25. The action proceeded to a second phase for determination of damages and individual reliance issues. See Lawrence E. Jaffe Pension Plan v. Household Int’l, Inc., 756 F. Supp. 2d 928, 930 (N.D. Ill. 2010).
344. See Household Verdict Form, supra note 343, at 1–40; id. tbl.B.; LaCroix, supra note 26.
346. See Household Rule 50 Motion, supra note 345. Under Federal Rule of Civil Procedure 50(a), the court may order judgment as a matter of law after a party has been fully heard on an issue if the court finds that “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” See FED. R. CIV. P. 50(a)(1). If the court does not grant a Rule 50(a) motion, the party requesting judgment as a matter of law may renew their motion following a verdict. See FED. R. CIV. P. 50(b).
347. See Household Verdict Form, supra note 343, at 41 (“[W]rite the amount of loss per share, if any, that, according to the model you have chosen, any defendant’s conduct caused plaintiffs to suffer on each of the dates . . . .”).
348. Id. The jury declined to select a specific disclosures model put forth by the plaintiffs’ expert. See id.
349. See id. at 11, 41 & tbl.B (no inflation determined until March 23, 2001, the date of the first misstatement).
highest amount of inflation claimed by the plaintiffs’ expert throughout the class period, even though the plaintiffs’ expert opined that the March 23, 2001 misstatement only inflated the share price by 67 cents.\footnote{350} Essentially, the jury found the maximum amount of inflation present in Household’s stock at the start of liability.\footnote{351} The jury found that following March 23, 2001, inflation floated between negative $4.66 and $23.94 per share.\footnote{352}

In its Rule 50 motion, Household attacked these findings, arguing that the plaintiffs’ leakage theory was legally defective.\footnote{353} Because the plaintiffs argued that Household’s stock price declined as a result of information trickling into the market, rather than through a corrective disclosure, the plaintiffs’ damages model could not identify the mechanism for revealing the truth.\footnote{354} If it could not identify this mechanism, it necessarily could not disaggregate confounding factors, and thus could not prove loss causation.\footnote{355} Perhaps more importantly, Household argued that the plaintiffs’ purported failure to identify a disclosure mechanism could not prove loss causation because there was no proof that the stock price declines were tied to an earlier misstatement.\footnote{356} In other words, even if the leaked information caused the price drops, the plaintiffs introduced no evidence describing exactly what was revealed.\footnote{357}

Household also argued that the jury verdict was irreconcilably inconsistent because the jury found that share price inflation actually increased on days where there was no misstatement.\footnote{358} Moreover, the defendants objected to the verdict form, which did not require the jury to decide which specific elements of a Rule 10b-5 claim were satisfied for each misstatement.\footnote{359}

\footnote{350. See Opposition to Household Rule 50 Motion, supra note 345, at 8, 9, 11 (noting that plaintiffs’ expert “capped” the quantification to the cumulative residual price decline of $23.94); see also id. at 9 n.8 (noting that even though there was no identifiable news during one interval in the class period, “inflation declines . . . because of leakage which dissipates inflation”); Household Rule 50 Motion, supra note 345, at 11–12, 29–30 (arguing on materiality grounds that the jury’s verdict is fatally inconsistent because fourteen of the misstatements for which defendants were found liable—out of a total of seventeen—caused no new inflation in the share price).

351. See Opposition to Household Rule 50 Motion, supra note 345, at 8; Household Verdict Form, supra note 343, tbl.B.

352. See Household Verdict Form, supra note 343, tbl.B. Inflation remained constant until September 6, 2001, then oscillated. See id. “Negative” inflation occurred beginning in September 2002. See id. Inflation returned to zero dollars on the final day of the class period. See id.; see also LaCroix, supra note 26 (noting that “[n]egative share inflation is a puzzling concept that . . . will have to be sorted out”).

353. See Household Rule 50 Motion, supra note 345, at 6–10. Defendants relied on the court’s opinion in In re Williams Sec. Litig., 496 F. Supp. 2d 1195, 1266–67 (N.D. Okla. 2007), aff’d, 558 F.3d 1130 (10th Cir. 2009), discussed supra Part III.C.

354. See Household Rule 50 Motion, supra note 345, at 5.

355. Id.

356. See id. at 8–10.

357. See id.

358. See id. at 30.

359. See id. at 60–61 (arguing that the legal standard would be better served “by having the jury expressly address the predicate loss causation element . . . before turning to the ultimate question of liability”). According to Household, the verdict “produced unintelligible findings of liability coupled with zero or negative inflation.” Id. at 61.
For their part, the plaintiffs resisted these arguments on the grounds that *Dura* does not require a specific “parsing exercise” between theories of liability and inflation; the plaintiffs argued that the jury need not match inflation exactly to an expert’s suggested amount; and that the defendants waived their objections by failing to request subsequent jury deliberations to clarify the alleged defects in the verdict form. The court struck Household’s motion pending the damages phase of the trial. To date, the court has not entered a final judgment.

2. The *Vivendi* Verdict

In 2002, shareholders of Vivendi Universal, S.A. sued the corporation and several of its officers, alleging that Vivendi violated the federal securities laws, including Section 10(b) of the ‘34 Act. The plaintiffs claimed that the defendants misrepresented Vivendi’s liquidity condition during a class period stretching from October 2000 to August 2002. The court certified the matter as a class action in 2007, and trial began in October 2009.

Following a three-month trial, the jury returned its verdict on January 29, 2010. The jury found Vivendi liable for all fifty-seven alleged misstatements. As in *Household*, the jury determined inflation on a daily per-share basis across the entire class period of approximately 400 days. Vivendi challenged the plaintiffs’ proof of loss causation in a post-trial motion.

At trial, the plaintiffs argued that Vivendi concealed its risk of a liquidity crisis, and the plaintiffs’ expert opined that those risks materialized over nine days during the class period. Those events were primarily

---

360. See Opposition to Household Rule 50 Motion, *supra* note 345, at 12.


363. See id.; see also id. at 537–43 (detailing the evidence supporting defendants’ misrepresentations of its liquidity condition); *In re Vivendi Universal, S.A. Sec. Litig.*, 634 F. Supp. 2d 352, 353–54 (S.D.N.Y. 2009) (denying defendants’ motion for summary judgment on loss causation).

364. See *In re Vivendi*, 765 F. Supp. 2d at 522–23.


366. See *Vivendi* Verdict Form, *supra* note 365, at 1–57. The jury attributed no liability to the co-defendants. See id. at 69.

367. See id. at 58–68. Unlike in *Household*, the *Vivendi* verdict form required jurors to find that the plaintiffs proved each element of their Section 10(b) claims for each of the fifty-seven misstatements. See *In re Vivendi*, 765 F. Supp. 2d at 524.


369. See *In re Vivendi*, 765 F. Supp. 2d at 556.
unexpected asset sales or downgrades of Vivendi’s debt by the ratings agencies. Rather than conducting an event study to ascertain what disclosures inflated the value of the security, the plaintiffs’ event study examined the gradual materialization of the fraud over those nine dates. The defendants introduced evidence that the market was aware of the information released on those dates, so the price drops on the nine materialization dates that purportedly revealed the fraud could not be attributable to the disclosures. This is an application of the “truth on the market” doctrine; if disclosures reveal old news, they cannot impact the market price of the security or cause any losses. The defendants introduced evidence that the market knew of Vivendi’s poor cash flow, high debt load, and other liquidity risks prior to the materialization dates in 2002. Additionally, the defendants sought to rebut the plaintiffs’ evidence with testimony that the plaintiffs’ expert did not conduct a proper event study, and that the losses on the materialization dates did not correspond to the revelation of the fraud, but to unrelated industry-wide or market-wide declines. Thus, this “counter-event” study sought to identify superseding causes that would stifle the plaintiffs’ Dura analysis.

The trial’s causation issues related to the jury’s damage findings. The plaintiffs submitted daily calculations of per-share damages to the jury. The jury’s ultimate findings roughly halved the amount of inflation proffered by the plaintiffs’ expert. For example, the jury found that there was per-share inflation of €2.40 on September 10, 2001, then again on October 1, 2001. Interestingly, the jury found that there was zero stock price inflation between those dates, yet there was no intervening

375. See Vivendi Trial Transcript, supra note 372, at 6264:16–6266:25, 6267:1–25, 6274:17–6275:19 (testimony of William Silber). The defendants’ expert conducted his own event study, and then testified that the plaintiffs did not “separate out the alleged misrepresentations from other news,” thus returning an incorrect measure of inflation. See Vivendi Trial Transcript, supra note 372, at 6264:16–6266:25, 6274:17–6275:19 (testimony of William Silber) (testifying that plaintiffs’ expert, among other things, did not use a proper control period or a correct measure of volatility).
376. See Vivendi Trial Transcript, supra note 372, at 7437:17–7438:20; Vivendi Verdict Form, supra note 365, at 58–68.
377. See In re Vivendi 765 F. Supp. 2d at 524.
378. See Vivendi Verdict Form, supra note 365, at 63.
379. See id.; see also Vivendi Rule 50 Motion, supra note 368, at 30 n.23. In its Rule 50 motion, Vivendi argued that since inflation returned to zero on September 11, 2001, the class period must end on that date. See id. at 26–29 (arguing that Vivendi’s lone concealed risk—a liquidity crisis—was fully known to the market since, according to the jury’s findings of fact, inflation returned to zero on eight separate dates during the class period). Vivendi also put forth arguments that the plaintiffs did not produce sufficient evidence to satisfy the Second Circuit’s “zone of risk” test as articulated in In re Omnicom Group, Inc. Securities
disclosure. Effectively, a class member who purchased Vivendi stock on September 10, 2001 and then sold before October 1, 2001 was damaged by fraud, even though there was no event that would trigger the dissipation. Vivendi argued that this “compromise” verdict was impermissible, and demanded a new trial.

On February 17, 2011, the district court largely denied Vivendi’s Rule 50 motion, rejecting the defendants’ loss causation arguments. In its decision, the court held that a reasonable juror could have concluded that the fraud materialized on the nine dates proffered by the plaintiffs. The court noted that the concealed risks were reasonably remote to those who believed the fraud; for example, the plaintiffs put forth evidence that certain materialization events “surprised” market analysts. The matter is still pending final judgment, though Vivendi has indicated that it will appeal.

3. The Apollo Verdict

A third class action, In re Apollo Group, Inc. Securities Litigation, reached a jury verdict on January 16, 2008. Apollo Group, Inc. is the parent company of the University of Phoenix, a for-profit university. The plaintiffs alleged that Apollo made misstatements related to an investigation by the U.S. Department of Education (DOE) into the University of Phoenix’s possible violations of DOE regulations. The district court eventually overturned the verdict because the facts of the alleged corrective disclosure, an analyst report dealing with the DOE investigation, had previously been disclosed in articles in the Wall Street Journal and the Chicago Tribune discussing the contents of a DOE report. Apollo’s stock price had not reacted to the prior news articles,
and only suffered a statistically significant price drop after publication of the analyst report. In overturning the verdict, the district court held that since the analyst report contained no new information, it could not be corrective. On appeal, the Ninth Circuit reversed the district court and restored the jury verdict. Apollo petitioned the Supreme Court for certiorari to consider whether liability for a stock price decline that occurred a week after the news first became public was consistent with the presumption of an efficient market underlying FOTM cases, and whether the analyst report, as a re-characterization of previously disclosed facts, could constitute a corrective disclosure. This presented the Supreme Court with an opportunity to resolve the longstanding tension between the economic theory that facilitated class actions and theories of causation, and the common law principles born out of a different era of litigation. The Supreme Court declined this opportunity. On March 7, 2011, the Court denied certiorari, leaving the standard of proof of loss causation open to the lower federal courts.

IV. THE INQUIRY, COLLAPSED: THE COURTS MUST DEVELOP RULES FOR PROOF OF LOSS CAUSATION

The Household, Vivendi, and Apollo verdicts illustrate unique issues of loss causation. Those trials produced mountains of evidence, competing experts, and, most likely, confused juries. Given the conceptual complexity of loss causation, the losing parties will invariably move for post-trial relief. This Note suggests that courts should develop anticipatory bright-line rules to deal with post-trial challenges to jury findings of causation and damages. These trials have incredible economic consequences, and the courts should adopt causation rules that are more consistent with economic theory.

Courts have historically accorded great deference to jury verdicts, so it is perhaps not surprising that jury findings are rarely disturbed. The results of all three of these trials, however, compel courts to find, as a matter of law, that there is no loss causation without an identifiable mechanism for disclosure that is quickly absorbed by the market, and that is connected to

dots for a bewildered market” but holding that a re-characterization of previously disclosed facts could sometimes be corrective). But see In re Omnicom Grp., Inc. Sec. Litig., 597 F.3d 501, 512 (2d Cir. 2010) (“A negative journalistic characterization of previously disclosed facts does not constitute a corrective disclosure . . . .”).

393. See id. at *3–4.
394. See In re Apollo Grp., Inc. Sec. Litig., No. 08-16971, 2010 WL 5927988, at *1 (9th Cir. June 23, 2010) (holding that a reasonable juror could have concluded that the challenged analyst reports were corrective disclosures).
395. The Basic Inc. v. Levinson Court explicitly declined to address this issue. See 485 U.S. 224, 248 n.28 (1988); supra note 181 and accompanying text.
396. See Petition for Writ of Certiorari, supra note 26, at *i (arguing that a circuit split exists on the issue of the immediacy of market reaction to a disclosure as well as to whether a re-characterization of previously disclosed facts constitutes a corrective disclosure).
398. See supra notes 13, 26 and accompanying text.
earlier misstatements. Consistent with the purposes of the securities laws, with the FOTM theory, and with the benefit of hindsight following three confused verdicts, this Note encourages the courts to tighten the causation standard.

A. Unpredictable Liability Does Not Serve the Legislative Goals of the Securities Laws

If one of the legislative purposes of the securities laws is transparency, the overriding goal of the Rule 10b-5 suit must be deterrence. Accordingly, the law should create rules that provide a reliable measure of liability for market participants. By definition, unpredictable liability does nothing to deter corporate mischief. In Vivendi and Household, the juries’ findings of share price inflation on a per-day basis did not match the evidence adduced at trial. The juries determined that the defendants made actionable misrepresentations, and were therefore liable, but the difficulties inherent in linking specific misstatements to inflation resulted in chaotic verdicts. The Supreme Court’s landmark Dura decision requires the plaintiffs to prove that a material misstatement inflated the market value of a security, thereby tainting the investment with fraud. The loss occurs, if at all, when the market learns the truth about the material misstatement; the market quickly absorbs that information and investors bear the corresponding loss. The securities laws protect investors from fraud, and do not exist to insure investors from all loss.

These verdicts, though they may ultimately yield billions of dollars in damages for shareholders, exonerate defendants of some misconduct, but impose liability for statements they never made. A plaintiff’s verdict may provide redress for some aggrieved shareholders, but complex cases require more detailed findings, and the results of these recent trials will not entirely dissuade future wrongdoers. The courts must fashion rules that strengthen the logical connection between liability and measurable loss to prevent further irrational verdicts; in short, the courts must effect conceptual clarity. They can accomplish this by designing a rule requiring that specific alleged misstatements are linked to a later loss caused by an identifiable disclosure mechanism. This solution can be extrapolated

399. See supra notes 64, 229 and accompanying text.
400. See Burch, supra note 15, at 380–86; supra notes 228–30 and accompanying text.
401. See supra notes 228–30 and accompanying text.
402. See supra Part III.E.1–2.
403. See supra Part III.E.1–2; note 382 and accompanying text.
404. See supra notes 208–10 and accompanying text.
405. See Schleicher v. Wendt, 618 F.3d 679, 683 (7th Cir. 2010); see also supra notes 104, 210, 266–71 and accompanying text.
406. See supra notes 26, 335 and accompanying text.
407. See supra notes 350–58 and accompanying text.
408. See supra notes 350–58 and accompanying text.
409. See Tricontinental Indus., Ltd. v. PricewaterhouseCoopers, LLP, 475 F.3d 824, 842–43 (7th Cir. 2007) (causation must be applied on a statement-by-statement basis); supra Parts II.C, III.C–D.
from the economic theory that currently dominates class actions and is premised on the market’s rapid absorption of information.411

B. The Bearer of Bad News? The Market Proves Loss Causation

The modern approach to loss causation depends in large part on the definition of a security’s value.412 In Dura, the Court held that at the instant of purchase, a stock’s value is equal to its market price.413 Because an investor can simply pass the inflation along to another buyer, there has been no economic loss.414

FOTM bridges loss causation and reliance, but the two elements remain conceptually distinct.415 If securities are purchased in an efficient market, the investor assumes that the market has accounted for all available public information concerning the issuer, and that the price represents the security’s integral value.416 Where an issuer disseminates a misstatement, the entire market is fooled until the information is later corrected.417

Putative class action plaintiffs seeking certification typically assert the FOTM theory that the Supreme Court upheld in Basic.418 But in Apollo, the Ninth Circuit restored a jury verdict that is likely inconsistent with both Basic and Dura.419 In Apollo, the defendant’s stock price did not react to corrective information published in prominent national newspapers, but instead reacted a week later when an analyst published an unflattering report.420 The market need not be omniscient, but it rapidly digests all public information.421 In Apollo, the market’s initial apathy to the newspaper report suggests that there was no loss causation as a matter of law.422 The drop in Apollo’s share price occurred much later, only after a recharacterization of the old news.423 Dura requires a causal connection

411. See supra Parts I.C–D.
412. See Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 342 (2005); Basic Inc. v. Levinson, 485 U.S. 224, 255 (1988) (White, J., concurring in part and dissenting in part) (noting that the Court’s opinion “implicitly suggests that stocks have some ‘true value’ that is measurable by a standard other than their market price”).
413. See Dura, 544 U.S. at 342; supra Part II.C.
414. See Dura, 544 U.S. at 342; supra Part II.C.
415. See Erica P. John Fund, Inc. v. Halliburton Co., 131 S. Ct. 2179, 2187 (2011); In re Omnicom Grp., Inc. Sec. Litig., 597 F.3d 501, 509–10 (2d Cir. 2010) (distinguishing between different types of loss causation); supra Parts I.C, II.A.
416. See supra Part II.A. The market conducts the valuation of the security that the investor in a face-to-face transaction normally would. See Basic Inc. v. Levinson, 485 U.S. 224, 244 (1988) (quoting In re LTV Sec. Litig., 88 F.R.D. 134, 143 (N.D. Tex. 1980)) (noting the agency role the market plays for the investor). Implicit in this judgment is an assumption that the integrity of the share price is not clouded by fraud. See id. at 245.
417. See supra notes 99–100 and accompanying text.
418. See supra notes 162–67 and accompanying text.
419. See In re Apollo Grp., Inc. Sec. Litig., No. 08-16971, 2010 WL 5927988 (9th Cir. June 23, 2010), cert. denied, 131 S. Ct. 1602 (2011).
420. See supra notes 390–94 and accompanying text.
421. See Eugene F. Fama, Efficient Capital Markets: II, 46 J. Fin. 1575, 1601–02 (1991); Kaufman & Wunderlich, supra note 258, at 192; supra note 268 and accompanying text.
422. See Petition for Writ of Certiorari, supra note 26, at *24–30; see also supra Part II.A; supra note 177 (discussing the Cammer factors).
423. See supra notes 389–93 and accompanying text.
between the misstatement, the revelation of the concealed fraud, and the loss. Because only new information can cause a loss, the intervening newspaper reports severed the chain of causation between the misstatement and the purported corrective disclosure, the analyst report.\textsuperscript{424} This is necessarily fatal to the plaintiff’s proof of loss causation.

The jury findings in \textit{Vivendi} and \textit{Household} suggest a similar conclusion.\textsuperscript{425} Without proof of some mechanism that created or revealed the fraud,\textsuperscript{426} inflation or dissipation that is not tied to a disclosure is inconsistent with a central tenet of ECMH: share prices do not arbitrarily respond to news.\textsuperscript{427} The juries’ random inflation findings, coupled with the plaintiffs’ leakage model that did not identify disclosure mechanisms or tie the loss to earlier misstatements, strongly supports a conclusion that there was no proof of loss causation.\textsuperscript{428} To avoid incongruous results, courts should require plaintiffs to bear the burden of disaggregating superseding causes and identify the mechanism that alerted the market to defendants’ fraud. Because disputed issues of fact are ultimately decided by the jury, the courts should continue to develop anticipatory rules for considering post-trial motions.

\textbf{C. Modern Theory and the Common Law: The Elements of a Rule 10b-5 Suit Are Inextricable}

In the market model of a securities class action, materiality, loss causation, reliance, and damages collapse into the same issue: the amount of inflation that a misrepresentation causes in the market price of a security, and the amount of dissipation that occurs once the market learns the truth.\textsuperscript{429} Courts first used the common law to fill the gaps in Rule 10b-5 jurisprudence, but soon realized that these principles were not entirely adequate to facilitate modern remedies.\textsuperscript{430} The courts needed more practical measures to cope with procedural requirements that might otherwise make recovery unavailable to aggrieved parties.\textsuperscript{431}

The unique nature of open-market transactions conducted over large, impersonal exchanges, and the special requirements for class action suits, forced the courts to apply an economic analysis clothed in the language of

\textsuperscript{424} See supra notes 126 and accompanying text.
\textsuperscript{425} See supra Part III.E.1–2.
\textsuperscript{426} See supra notes 321–24 and accompanying text.
\textsuperscript{427} See supra notes 121–27 and accompanying text.
\textsuperscript{428} See \textit{FOTM} made it much easier to maintain a class action, but it should require almost instant market reaction to news. See supra Parts I.D., II.A, notes 177, 424 and accompanying text. In other words, “the market cannot be efficient for purposes of assimilating a defendants’ fraud immediately into price, and then lazy and unresponsive when that fraud is revealed.” Petition for Writ of Certiorari, supra note 26, at *26–27.
\textsuperscript{429} See Fisher, supra note 290, at 878; Fox, supra note 20, at 845; supra note 259 and accompanying text.
\textsuperscript{430} See supra Part II.A, notes 9, 106–12 and accompanying text.
\textsuperscript{431} See supra Parts II.A, II.C, note 150 and accompanying text.
common law deceit.\textsuperscript{432} The necessity to provide an avenue of redress on a mass scale resulted in the courts’ endorsement of economic theory.\textsuperscript{433} The conflicts between common law fraud and modern securities fraud actions continue with loss causation.\textsuperscript{434} The bifurcation of transaction and loss causation, for example, is a modern policy invention that was first devised to limit liability.\textsuperscript{435} The \textit{Basic} decision permitted the lower courts to apply FOTM to create a presumption of reliance; now, the courts can also opt to alter the common law proximate cause analogy, which enabled broader theories of loss causation, to remain consistent with the ECMH.\textsuperscript{436} The \textit{Dura} Court did not have the benefit of hindsight, and judicial restraint urged a limited holding.\textsuperscript{437} However, three recent verdicts may force defendants to pay out damages for phantom losses that have little or no connection to actual misconduct; on the flip side, these verdicts may also deprive investors of their rightful share of damages.\textsuperscript{438} The mechanisms for market realization of the truth remain nebulous, clouding these findings.\textsuperscript{439} The common law is not well suited to cope with the modern policy issues underlying complex litigation.\textsuperscript{440} \textit{Dura} counseled the courts to look to causation in deceit actions for guidance, but the common law has very apparent limitations.\textsuperscript{441} The intrinsic differences between traditional reliance and the economic theory supporting the FOTM presumption are not easily reconciled.\textsuperscript{442} Loss causation has served well as both a measure of plaintiffs’ injury and as a gatekeeping mechanism, but it has not always done so at the proof stage.\textsuperscript{443} If it is to be useful at all, FOTM should be available for both plaintiffs and defendants at the class certification and proof stages, to

\textsuperscript{432} See supra note 9 and accompanying text; supra Parts II.A, II.C.
\textsuperscript{433} See supra Part II.A.
\textsuperscript{434} See supra notes 106–12 and accompanying text.
\textsuperscript{435} See supra notes 76–79, 195 and accompanying text.
\textsuperscript{436} See supra notes 168–73 and accompanying text; see also supra Parts I.B, III.C (discussing different theories of loss causation).
\textsuperscript{437} See Fox, supra note 20, at 846; Gillespie, supra note 203, at 172.
\textsuperscript{438} See supra Part III.E; see also John C. Coffee, Jr., \textit{Causation by Presumption? Why the Supreme Court Should Reject Phantom Losses and Reverse Broudo}, 60 B.U. L. Rev. 533, 533–34 (2005) (published prior to \textit{Dura} and describing the windfall purchase price inflation provides to plaintiffs).
\textsuperscript{439} See supra Part III.E.
\textsuperscript{440} See supra notes 160–66 and accompanying text. But see Fisch, supra note 73, at 813–14.
\textsuperscript{441} See supra notes 160–66 and accompanying text; see also supra Part I.D (discussing the class action mechanism of aggregation of claims).
\textsuperscript{442} See supra Part I.B.
\textsuperscript{443} See supra Part III. Causation issues plagued yet another trial; most recently, a district court set aside a jury verdict on loss causation grounds. See \textit{In re BankAtlantic Bancorp, Inc. Sec. Litig.}, No. 07-61542-CIV, 2011 WL 1585605, at *21 (S.D. Fla. Apr. 25, 2011) (holding that plaintiffs may prove loss causation “only by producing the testimony of an expert who has completed a reliable multiple-regression analysis, event study, and financial analysis in order to quantify the extent to which the claimed losses are the result of the alleged fraud”); see also supra note 337 (discussing this verdict).
demonstrate materiality, causation, and damages. Any other result would produce inconsistency, irrationality, and unfairness. The courts should intervene to uphold the purposes of the securities laws through closer adherence to the economic theories that enabled the modern class action, as well as to protect the rule of law set by the Supreme Court in Basic and Dura.

CONCLUSION

This Note attempts to shed some light on one of the most difficult conceptual issues in securities litigation. In Basic and Dura, and more recently in Halliburton, the Court painstakingly developed a framework for loss causation. Not surprisingly, causation became hotly contested, and litigants incurred substantial costs as a result. This Note does not propose a complete overhaul of a highly complex doctrine, but it does encourage the courts to establish consistency by tightening the causation standard to match the careful guidance set forth by the Supreme Court, in tandem with the economic underpinnings of securities class actions. By establishing bright-line rules for post-trial review, the courts will ensure that the parties have met their burden of proving loss causation.