Introduction

- Focus on the typical Rule 10b-5 securities fraud class action, governed by the Private Securities Litigation Reform Act of 1995 (“PSLRA”) with special reference to the credit crisis.
- Governing principles and methods of establishing:
  - Loss causation: Since 2005 Supreme Court decision in *Dura*, one of the most heavily litigated issues.
  - Damages: Critical to the strategy and outcome.
Loss Causation –
PSLRA and Dura Pharmaceuticals

- *Dura* held that the allegation that stock was purchased at an allegedly inflated price due to a fraudulent misrepresentation does not, in itself, adequately plead loss causation.

Connecting Fraud to the Loss

- “Loss causation is the causal link between the alleged misconduct and the economic harm ultimately suffered by the plaintiff.” *Lattanzio v. Deloitte & Touche LLP*, 476 F.3d 147, 157 (2d Cir. 2007).
- Plaintiff must show that (1) “the market reacted negatively to a corrective disclosure” or (2) defendants “misstated or omitted risks that did lead to the loss,” *i.e.* materialization of a concealed risk. *Lentell v. Merrill Lynch & Co., Inc.*, 396 F.3d 161, 173 (2d Cir. 2005).
Loss Causation Complaint
Allegations – Does Rule 9(b) Apply?


- However, the issue remains unsettled. *In re Gilead Sciences Sec. Litig.*, 536 F.3d 1049 (9th Cir. 2008) (dismissal of complaint reversed; pleading of loss causation found to satisfy Rule 9(b) particularity requirement in any event).

Loss Causation Complaint
Allegations – Does Rule 9(b) Apply? (cont’d)

- In *Teachers’ Ret. Sys. v. Hunter*, 477 F.3d 162, 186 (4th Cir. 2007), the court observed that there is a “strong case” for applying Rule 9(b) to loss causation allegations, but instead required “sufficient specificity to enable the court to evaluate whether the necessary causal link exists.”

- Some courts have applied Rule 9(b) to require “particularity” in the pleading of “the circumstances constituting fraud,” including loss causation. *In re First Union Sec. Litig.*, 2006 U.S. Dist. LEXIS 5083, *17-*18 (W.D.N.C. Jan. 20, 2006) (citing cases).
Loss Causation –
A Necessary Element for Class Certification?

- In *Oscar Private Equity Investments v. Allegiance Telecom, Inc.*, 487 F.3d 261 (5th Cir. 2007), the court ruled that plaintiffs must establish loss causation in order to obtain class certification.

- The *Oscar* court vacated the district court’s class certification order, citing *Miles v. Merrill Lynch*, 471 F.3d 24, 27 (2d Cir. 2006) (requiring court determination of each element of a Rule 23 class certification motion).


Loss Causation – Credit Crisis:
Potential Issues in PSLRA Cases

- Was the investor’s loss caused by the misrepresentation or, rather, by “changed economic circumstances, new industry-specific or firm-specific facts, conditions, or other events,” which account for the lower stock price? *Dura*, 544 U.S. at 352-53.

- Was the stock price drop caused by unanticipated business losses resulting from the credit crisis?

- Did a sub-prime finance company’s losses result from the decline in home prices or from “corrective disclosure” or “materialization of risk” as to previously undisclosed mortgage problems?
No Loss Causation – No Connection Between Fraud and Loss

- In *Lattanzio*, Second Circuit held there was no loss causation because plaintiffs did not “allege that Deloitte’s misstatements concealed the risk of Warnaco’s bankruptcy.” 476 F.3d at 157.
- Rule 10b-5 claim failed because fraudulent representation that an investor was accredited did not cause any loss. *ATSI Communc’ns, Inc. v. The Shaar Fund, Ltd.*, 493 F.3d 87 2d (2d Cir. 2007).

No Loss Causation – Losses Occur Prior to Corrective Disclosure

No Loss Causation –
Fraud Revealed After Unrelated Price Decline


- No loss causation where price dropped after bankruptcy announcement and plaintiff never alleged that “market’s acknowledgement of prior misrepresentations caused that drop.” *D.E. & J. Ltd. P’ship v. Conaway*, 133 F. App’x 994, 1000 (6th Cir. 2005).

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No Loss Causation
Price Drops on Unrelated Bad News


- *In re Tellium, Inc. Sec. Litig.*, 2005 WL 2090254, at *3-4 (D.N.J. Aug. 26, 2005): Announcement that revenues were lower than expected was held not to be a corrective disclosure, because the bad news did not disclose the fraud.
Loss Causation Shown – Materialization of the Concealed Risk

- Generally, if there is no corrective disclosure, the necessary materialization of risk is “sudden and caused the stock value to plummet.” *In re Rhodia S.A. Sec. Litig.*, 2007 U.S. Dist. LEXIS 72758 (S.D.N.Y. Sept. 26, 2007) (certain claims dismissed).

- For example, in *In re Parmalat Securities Litigation*, disclosure of a bond default was held to be the materialization of the alleged fraudulent scheme. 375 F. Supp. 2d 278, 284 (S.D.N.Y. 2005).

Loss Causation Shown – Materialization of the Concealed Risk (cont’d)

- Stock price decline following disclosure of accounting problems was held to be the materialization of risk from concealed internal control deficiencies. *In re Scottish Re Group Sec. Litig.*, 2007 U.S. Dist. LEXIS 81565, *59-*62 (S.D.N.Y. Nov. 2, 2007).

No Loss Causation –
No Concealed Risk Nor Corrective Disclosure

- Estimated $200 million jury verdict was overturned because the court found that analyst reports “did not provide any fraud-revealing analysis” and were therefore not “corrective.” In re Apollo Group, Inc. Sec. Litig., 2008 WL 3072731, at *3 (D. Ariz. Aug. 4, 2008)
- Claims against accounting firm for allegedly false audit opinions concerning AOL were dismissed to the extent they neither concealed any undisclosed risk nor were ever corrected. In re AOL Time Warner, Inc. Sec. Litig., 503 F. Supp. 2d 666, 677-80 (S.D.N.Y. 2007)

Selected Cases –
Loss Causation Allegations Sufficient

- In re Bradley Pharms., Inc. Sec. Litig., 2006 WL 740793 (D.N.J. Mar. 23, 2006): Court held that announcement of SEC investigation, resulting in stock drop, could be a partial corrective disclosure.
Event Studies Assessing Loss Causation and Damages

- Event studies may be used to prove or disprove loss causation by providing a methodology for analyzing company-specific stock price movements.
- “The tool most often used by experts to isolate the effect of a corrective disclosure on the stock price is the ‘event study.’” Apollo, supra, at n. 1.

Event Studies – Methodology and Use

- Components and methodology of event studies:
  - Regression analysis of stock price changes
  - Adjust for marketwide and industrywide stock price changes, unrelated to fraud
  - Identify company-specific price movements
### Integrated Chronology

<table>
<thead>
<tr>
<th>Company</th>
<th>Price/Volume</th>
<th>Market Return</th>
<th>Industry Index Return</th>
<th>Company Residual Return</th>
<th>Selected Public Announcements</th>
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</thead>
<tbody>
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<td>9/9/96</td>
<td>$13,500</td>
<td>1.89%</td>
<td>0.82%</td>
<td>0.64%</td>
<td>1.55%</td>
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<td>9/10/96</td>
<td>$13,000</td>
<td>-3.70%</td>
<td>0.06%</td>
<td>0.56%</td>
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<td>Tuesday</td>
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<td></td>
<td></td>
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<tr>
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<td>-7.69%</td>
<td>0.39%</td>
<td>0.54%</td>
<td>-7.96%*</td>
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<tr>
<td>Wednesday</td>
<td>240,985</td>
<td></td>
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*There's still time to catch a ride.*

Healthy Alliance, InfyNet Medical Management, Fort Lauderdale, near $17.25 after the company entered into a

five-year agreement to provide physician-management services to Physicians Corp. of America, a health-care provider in

Miami. Terms of the agreement weren't disclosed.

(Source: The Wall Street Journal)
Possible Attacks on Event Studies

- *In re Xcelera.com Sec. Litig.*, No. 00-11649-RWZ (D. Mass. April 25, 2008): Court granted *Daubert* motion precluding testimony of plaintiff’s expert (and later summary judgment dismissal), because event study was flawed, including omission of stock price rise on first trading day following the first corrective disclosure.


Expert Opinions Showing Loss Causation


Failure of Expert to Show Loss Causation

- Plaintiffs offered no expert testimony or other evidence to show loss causation, where the stock price had collapsed before alleged fraud was revealed. *Ray v. Citigroup Global Markets, Inc.*, 2005 U.S. Dist. LEXIS 24419, at *11 (N.D. Ill. Oct. 18, 2005), *aff’d*, 482 F.3d 991 (7th Cir. 2007).

- Expert testimony was inadmissible for failure of expert to address obvious alternative explanations for alleged losses. *In re Williams Sec. Litig.*, 496 F. Supp. 2d 1195 (N.D. Okla. 2007).

Defense Expert May Disprove Loss Causation

- “Defendants’ expert’s event study proved that none of the alleged misstatements . . . had an effect on the stock price.” *Nathenson v. Zonagen, Inc.*, 322 F. Supp. 2d 764, 780 (S.D. Tex.), *aff’d in pertinent part*, 267 F.3d 400 (5th Cir. 2001).
Damages

- No express measure of damages under Section 10(b)
- Section 28(a) provides that recovery shall not exceed a plaintiff’s “actual damages”

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Damages Measure in Section 10(b)

“Fraud on the Market” Cases

  - Amount overpaid by stock *purchasers* because stock price was artificially inflated by alleged misrepresentation or omission; or
  - Amount lost by stock *sellers* because stock price was artificially deflated by alleged misrepresentation or omission
Aggregate Damages in Class Action

- Multiply: Per share damages (generally determined by event studies)
- Times: Number of shares damaged (plaintiffs offer stock trading models/defendants may object)
- PSLRA provides “bounce-back” rule which reduces per share damages, if stock price rebounds during 90 days following corrective disclosure, see 15 U.S.C. §78u-4(e)

Determining Per-Share Damages During Class Period

- Per-share damages: The difference between “true value” of stock and actual price paid by buyer
- Generally, plaintiffs argue that stock price decline after corrective disclosure reflects amount price was inflated
- Proving damages can be a “daunting task” -- usually a “battle of experts,” In re Microstrategy Sec. Litig., 150 F.Supp. 2d 896 (E.D. Va. 2001)
Event Studies Necessary to Calculate Per Share Damages

- Need to factor out extraneous factors and isolate effect of fraud on stock price
- Damage calculations have been rejected for failure to conduct an event study, e.g., In re Imperial Credit Indus.; Executive Telecard Sec. Litig., 979 F. Supp. 1021 (S.D.N.Y. 1997); Oracle Sec. Litig., 829 F. Supp. 1176 (N.D. Cal. 1993)
- Where regression analysis was not feasible, event study was not required in RMED Int’l v. Sloan’s, 2000 U.S. Dist. LEXIS 3742 (S.D.N.Y. Mar. 24, 2000)

Calculating Number of Damaged Shares

- How many shares were purchased during class period and still held at end of class period?
- Plaintiffs’ experts use stock trading models based upon key assumptions
- The calculation can vary widely depending upon the model and the assumptions, e.g., in the Apollo case, plaintiffs had estimated that damaged shares numbered between 30- and 50-million shares.
Stock Trading Model

- Estimate float available for trading by class members by making adjustments to total outstanding shares
- Estimate total shares traded by class members by making adjustments to reported trading volume
- Assume trading pattern: Determine number of retained shares that are damaged
Stock Trading Models – Typical Adjustments to Float and Trading Volume Inputs

- Float adjustments
  - Institutional investors that do not trade during the damage period (-)
  - Insider holdings (-)
  - Company stock in 401(k) plan (-)
  - Short interest (+)
- Trading volume adjustments
  - Double counting in the reported volume due to market maker activity (-)
  - Short sellers covering positions (-)
  - Changes in insiders holdings (-)
  - Stock buybacks (-)
  → Lower float or trading volume results in fewer retained shares and lower damages

Types of Stock Trading Models

- Proportional Trading Model (PTM)
  - Typical original plaintiff-style model
  - Assumes every share is equally likely to trade
- Accelerated Trading Model (ATM)
  - Generally lower damages than PTM
  - Assumes shares traded since beginning of class period are more likely to trade than shares that have not traded during class period
- Two Trader Model (TTM)
  - Modified plaintiff-style model
  - Generally lower damages than PTM
  - Assumes one class of shares (“Traders”) has a much higher likelihood of trading than other class of shares (“Investors”)

### Example of PTM Trading Damages Analysis

#### Exhibit

#### Trading Damages Analysis

**Scenario A**

<table>
<thead>
<tr>
<th>Damage Ribbon:</th>
<th>Constant Dollar, $3.548</th>
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</thead>
<tbody>
<tr>
<td><strong>DATE</strong></td>
<td><strong>VOLUME ENTERED</strong></td>
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</table>

#### Notes:
- Accelerated Trading Model assumes previously traded shares are 5 times more likely to trade than untraded shares.
- Two-Trader Model assumes high-intensity "traders" hold 20% of the float and account for 80% of daily volume, and low-intensity "investors" hold 80% of the float and account for 20% of daily volume.

### Stock Trading Models Generate Substantial Differences in Estimated Damages

**Example:**
- Total Float Available for Trading: 1,000,000 shares
- Daily Trading Volume: 10,000 shares / day
- Inflation Per Share: $5/share (constant dollar inflation)
- Class Period Length: 90 days

**Diagram:**
- Proportional
  - $3.0 million
- Accelerated
  - $1.9 million
- Two-Trader
  - $1.8 million

**Source:** B. Stangl and G. Jetley, Analysis Group, Inc.
Some Court Opinions Have Rejected Trading Models

- One court has ruled that the PTM was inadmissible under Daubert, see Kaufman v. Motorola, 2000 U.S. Dist. LEXIS 14627 (N.D. Ill. Sept. 21, 2000)

- Plaintiffs’ expert testified that the PTM:
  - “Had never been tested against reality”
  - “Never accepted by professional economists”

- Effect: Jury would determine per-share damages, rather than aggregate damages

- In Apollo, supra, the jury had determined a per share damage amount rather than a total damage award
Some Court Opinions Have Rejected Trading Models (cont’d)

- One court has ruled that the Two Trader Model is of “significantly questionable reliability” and “probably does not satisfy the Daubert test.” In re Broadcom Corp. Sec. Litig., 2005 U.S. Dist. LEXIS 12118, at *8-9 (C.D. Cal. June 3, 2005).
  - The court ruled that a jury determination of the per share damage per day combined with use of the claims administration process was more accurate and reliable.
  - Broadcom cites other courts that rejected trading models, 2005 U.S. Dist. LEXIS 12118, at *4-*7

Other Courts Have Accepted Trading Models or Other Proof of Aggregate Damages

- In In re Worldcom, Inc. Sec. Litig., 2005 U.S. Dist. LEXIS 3143 (S.D.N.Y. Mar. 3, 2005), evidence of aggregate damages was allowed, but no stock trading model was at issue
- Some courts view criticisms of PTM as going to weight and credibility, rather than admissibility, e.g., In re Cendant Corp. Sec. Litig., 109 F. Supp. 2d 235 (D.N.J. 2000)
Conclusion

- Securities fraud cases present loss causation and damage issues that invite creative legal and economic analysis.
- Expert witnesses and studies play an important role in analyzing and presenting arguments on those issues.