

# USE OF EXPERT WITNESSES IN SECURITIES CASES

## **EXPERTS IN PSLRA CASES: MATERIALITY, LOSS CAUSATION AND DAMAGES**

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# Introduction

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- Focus on typical PSLRA class action
- Expert testimony may be used to prove or disprove:
  - Materiality
  - Causation
  - Damages

## **Event Studies -- Methodology**

- Regression analysis of stock price changes
- Adjust for marketwide and industrywide stock price changes, unrelated to fraud
- Identify company-specific price movements

## Event Studies -- Uses

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- Used to analyze materiality, loss causation and stock price movements used in damages calculations
  - *In re Imperial Credit Indus. Sec. Litig.*, 252 F. Supp. 2d 1005, 1014 (C.D. Cal. 2003): An event study “is an accepted method for the evaluation of materiality [and] damages to a class of stockholders”

# Integrated Chronology

<i>Date</i>	<i>Company</i>		<i>Market Return</i>	<i>Industry Index Return</i>	<i>Company Residual Return</i>	<i>Selected Public Announcements</i>
	<i>Price/ Volume</i>	<i>Return</i>				
9/9/96 Monday	\$13.500 62,590	1.89%	0.82%	0.64%	1.55%	
9/10/96 Tuesday	\$13.000 112,117	-3.70%	0.06%	0.56%	-4.02%	
9/11/96 Wednesday	\$12.000 240,985	-7.69%	0.39%	0.54%	-7.96%*	<p>THERE'S STILL TIME TO CATCH A RIDE:            Healthy Alliance: InPhyNet Medical Management, Fort Lauderdale, rose 11% to \$17.25 after the company entered into a five-year agreement to provide physician-management services to Physician Corp . of America , a health-care provider in Miami. Terms of the agreement weren't disclosed.            (Source: The Wall Street Journal)</p>

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# Materiality

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- Plaintiffs' experts: Misrepresentation or non-disclosure caused company-specific price movements
- Defendants' experts: Stock price movements unrelated to alleged fraud
- Defendant won summary judgment based in part on event study showing lack of materiality in the *World Access Sec. Litig.*, 2004 U.S. Dist. LEXIS 4403 (N.D. Ga. Mar. 16, 2004)

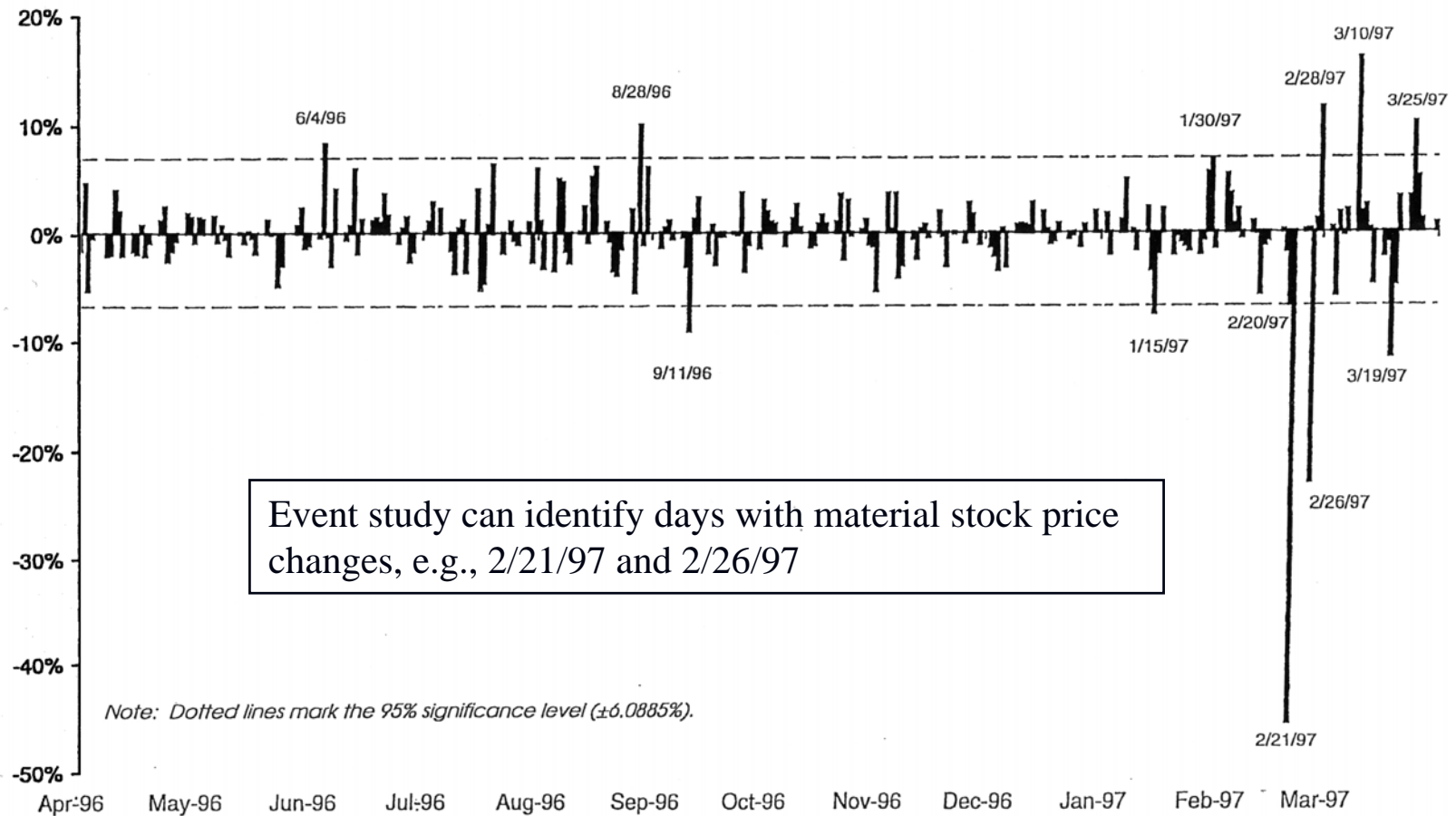
## **Materiality (cont'd)**

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- *H&R Block Inc. Sec. Litig.*, 2004 U.S. Dist. LEXIS 14522 (S.D.N.Y. July 27, 2004): Motion to dismiss was granted as disclosure in news articles adequately apprised investors of allegedly concealed facts
- *DeMarco v. Lehman Brothers*, 222 F.R.D. 243, 247-49 (S.D.N.Y. 2004): Class certification denied because plaintiffs' expert's conclusions as to materiality of securities analyst's recommendations were "facially unreliable" and "plainly irrelevant"



# Residual Average Price Changes



## Loss Causation and *Dura Pharmaceuticals*

- Potential trap for plaintiffs
- PLSRA provides: “[T]he plaintiff shall have the burden of proving that the [alleged 10b-5 violation] caused the loss . . . .” 15 U.S.C. § 78u-4(b)(4)
- In *Dura Pharmaceuticals v. Broudo*, 125 S. Ct. 1627 (2005), the Supreme Court held that the allegation that stock was purchased at an allegedly inflated price due to a fraudulent misrepresentation does not, in itself, establish loss causation

## Connecting Fraud to the Loss

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- 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).
- There was 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 (6<sup>th</sup> Cir. 2005).

## Connecting Fraud to the Loss (cont'd)

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- *In re Gilead Sciences Sec. Litig.*, 2005 WL 2649200, at \*7-8 (N.D. Cal. Oct. 11, 2005): Where disclosures were unrelated to alleged fraud, the court ruled loss causation allegations were “too attenuated to withstand scrutiny under *Dura*”
- *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 held not to be a corrective disclosure tied to the alleged fraud

## No Loss Causation Where Fraud Revealed After Unrelated Price Decline

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- Courts find no loss causation where the disclosure of fraud occurred after stock price dropped for reasons unrelated to the fraud
- *Robbins v. Koger Properties*, 116 F.3d 1441 (11th Cir. 1997): \$80 million jury verdict reversed
- *In re The Warnaco Group Sec. Litig.*, 388 F. Supp. 2d 307, 317 (S.D.N.Y. 2005): Accounting errors first disclosed only after company's bankruptcy

## Event Studies and Loss Causation

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- Event studies may be used to prove or disprove loss causation by providing a methodology for analyzing company-specific stock price movements
- Plaintiffs won summary judgment using an event study showing loss causation in *Gaming Lottery Sec. Litig.*, 2001 U.S. Dist. LEXIS 2034 (S.D.N.Y. Mar. 1, 2001)
- *Ikon Office Solutions Sec. Litig.*, 2001 U.S. Dist. LEXIS 1172 (E.D. Pa. Feb. 6, 2001): Plaintiff expert's event study did not show price movements were due to alleged fraud

## Expert Opinions on Loss Causation

- Court denied defendants' summary judgment motion based on plaintiff expert's opinion, but allowed possible later *Daubert* challenge in *In re Bristol-Myers Squibb Sec. Litig.*, 2005 U.S. Dist. LEXIS 18448, at \*62-63 (D.N.J. Aug. 17, 2005)
- Plaintiffs' expert showed loss causation that raised an issue for trial in *In re Pharmaprint, Inc. Sec. Litig.*, 2002 U.S. Dist. LEXIS 19845, at \*26 (D. N.J. Apr.17, 2002)

## 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)
- 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"

## Damages Measure in Section 10(b) “Fraud on the Market” Cases

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- “Out-of-pocket” measure of damages. *Affiliated Ute*, 406 U.S. 128, 155 (1972); *Gurary v. Winehouse*, 235 F.3d 792 (2nd Cir. 2000)
  - 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

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- 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

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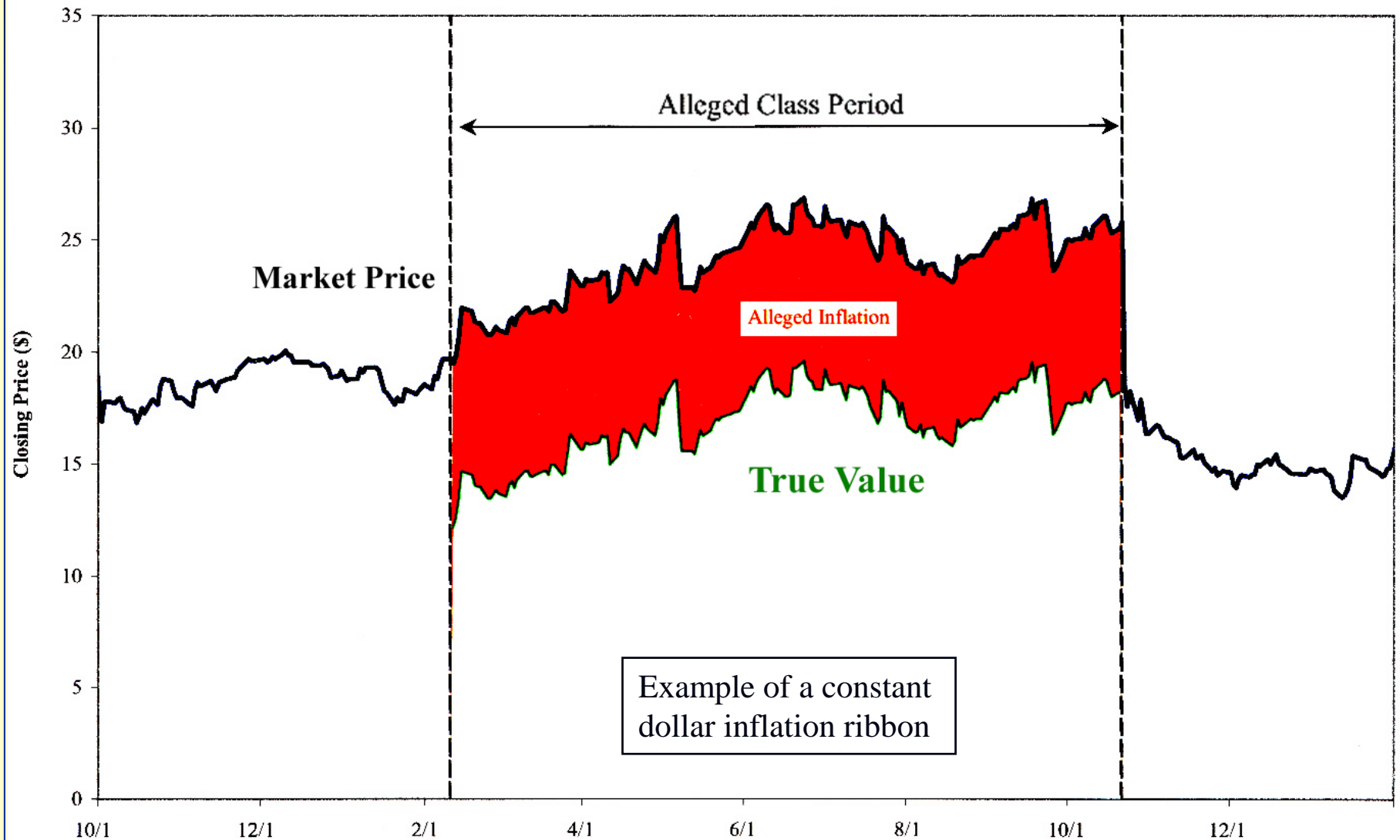
- Need to factor out extraneous factors and isolate effect of fraud on stock price
- Damage calculations have been rejected for failure to conduct an event study, *e.g.*, *In re Imperial Credit Indus.; Executive Telecard Sec. Litig.*, 979 F. Supp. 1021 (S.D.N.Y. 1997); *Oracle Sec. Litig.*, 829 F. Supp. 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)

## **Event Studies and *Daubert* Challenges**

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- Choice of industry index
- Performance of the regression analysis
- Length of class period
- Time period for market price fully to reflect corrective disclosure

# Daily Closing Price, Alleged True Value and Inflation



## **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



# Stock Trading Model

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- 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

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## ■ 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

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- ❑ 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

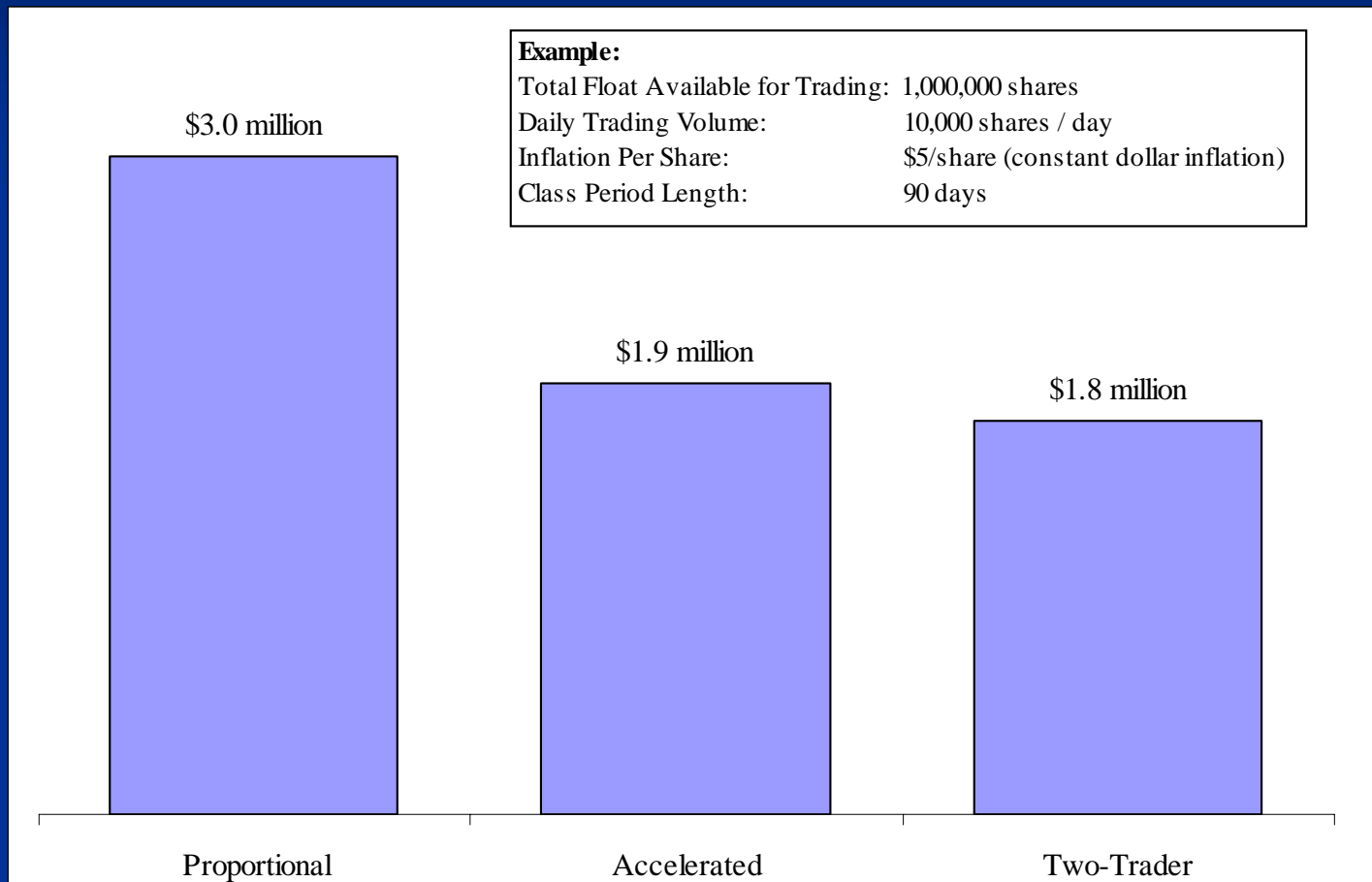
### Trading Damages Analysis Scenario A

Trading Volume Reduction: 62%  
 Trader 1 Trades: 34%  
 Trader 1 Holds: 32%

Damage Ribbon: Constant Dollar, \$3.548

DATE	VOLUME	ENTERED	NOT ENTERED	RETAINED SHARES	RETAINED DAMAGES	SELLING SHARES	SELLING DAMAGES	CUMULATIVE DAMAGES
4/1/96	110,808	110,808	28,284,473	59,177	209,958	51,631	-	44,675,361
4/2/96	93,632	93,276	28,192,529	50,165	177,984	43,467	-	44,465,403
4/3/96	68,514	68,035	28,125,469	36,794	130,544	31,720	-	44,287,419
4/4/96	39,292	38,925	28,087,103	21,129	74,966	18,163	-	44,156,875
4/8/96	39,710	39,287	28,048,381	21,383	75,867	18,327	-	44,081,908
4/9/96	66,234	65,438	27,983,886	35,747	126,829	30,487	-	44,006,041
4/10/96	45,600	44,950	27,939,584	24,649	87,455	20,951	-	43,879,212
4/11/96	31,500	31,010	27,874,521	17,045	60,477	14,455	-	43,791,757
4/12/96	66,272	65,155	27,810,308	35,943	127,525	30,329	-	43,731,280
4/15/96	33,212	32,578	27,778,204	18,033	63,982	15,179	-	43,603,755
4/16/96	59,432	58,213	27,719,990	32,513	115,358	26,919	-	43,539,773
4/17/96	88,160	86,171	27,633,820	48,739	172,925	39,421	-	43,424,415
4/18/96	64,182	60,167	27,573,653	34,260	121,553	27,488	-	43,251,491
4/19/96	55,442	51,004	27,522,649	29,160	103,459	23,299	-	43,129,937
4/22/96	98,952	90,863	27,431,786	52,217	185,264	41,411	-	43,026,478
4/23/96	76,076	69,625	27,362,161	40,247	142,795	31,735	-	42,841,214
4/24/96	45,410	41,454	27,320,707	24,060	85,366	18,907	-	42,698,419
4/25/96	53,276	48,561	27,272,146	28,278	100,330	22,131	-	42,613,053
4/26/96	41,610	37,860	27,234,286	22,117	78,470	17,254	-	42,512,723
4/29/96	71,440	64,911	27,169,375	38,063	135,047	29,533	-	42,434,253
4/30/96	54,834	49,704	27,119,671	29,269	103,847	22,615	-	42,299,206
5/1/96	75,582	68,385	27,051,286	40,446	143,501	31,069	-	42,195,359

# Stock Trading Models Generate Substantial Differences in Estimated Damages



Source: B. Stangle and G. Jetley, Analysis Group, Inc.

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.

# Example of PTM Trading Damages Analysis (cont'd)

DATE	VOLUME	ENTERED	NOT ENTERED	RETAINED SHARES	RETAINED DAMAGES	SELLING SHARES	SELLING DAMAGES	CUMULATIVE DAMAGES
1/10/97	30,932	18,688	17,208,175	28,533	101,236	2,399	-	7,801,202
1/13/97	29,070	17,544	17,190,635	26,843	95,239	2,227	-	7,699,966
1/14/97	349,638	210,792	16,979,884	326,867	1,159,723	22,771	-	7,604,727
1/15/97	333,336	198,496	16,781,427	315,317	1,118,743	18,019	-	6,445,004
1/16/97	471,998	272,825	16,508,602	446,425	1,583,915	17,198	-	5,326,261
1/17/97	79,534	43,697	16,464,906	72,878	258,572	2,607	-	3,742,346
1/20/97	43,244	23,696	16,441,210	39,683	140,795	1,360	-	3,483,774
1/21/97	75,240	41,168	16,400,042	69,216	245,580	2,193	-	3,342,979
1/22/97	14,820	8,089	16,391,953	13,641	48,398	425	-	3,097,399
1/23/97	42,788	23,341	16,368,612					
1/24/97	58,634	31,940	16,336,672					
1/27/97	28,880	15,702	16,320,970					
1/28/97	53,618	29,123	16,291,847					
1/29/97	79,610	43,163	16,248,684					
1/30/97	35,910	19,418	16,229,266					
1/31/97	37,696	20,359	16,208,907					
2/3/97	76,950	41,508	16,167,399					
2/4/97	107,236	57,697	16,109,702					
2/5/97	41,230	22,104	16,087,598					
2/6/97	26,410	14,139	16,073,459					
2/7/97	17,480	9,350	16,064,109					
2/10/97	14,098	7,537	16,056,572					
2/11/97	20,634	11,025	16,045,547					
2/12/97	49,286	26,317	16,019,230					
2/13/97	24,434	13,026	16,006,204	23,033	81,720	157	-	766,339
2/14/97	26,638	14,189	15,992,015	25,133	89,171	149	-	684,619
2/18/97	9,310	5,183	15,986,832	9,191	32,611	52	-	595,448
2/19/97	38,494	21,424	15,965,408	38,057	135,026	162	-	562,837
2/20/97	121,448	67,499	15,897,909	120,578	427,811	-	-	427,811
	16,958,070	12,804,889	15,897,909	12,591,866	44,675,361	4,192,515	-	44,675,361

DATE	RETAINED SHARES	RETAINED DAMAGES	SELLING SHARES
1/14/97	326,867	1,159,723	22,771
1/15/97	315,317	1,118,743	18,019
1/16/97	446,425	1,583,915	17,198
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Total	12,591,866	44,675,361	4,192,515

## Some Court Opinions Have Rejected Trading Models

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- 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 as to proportional trading:
    - “Had never been tested against reality”
    - “Never accepted by professional economists”
  - Effect: Jury would determine per-share damages, rather than aggregate damages



## Some Court Opinions Have Rejected Trading Models (cont'd)

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- Recently, a California federal judge ruled that the Two Trader Model was of “significantly questionable reliability” and “probably does not satisfy the *Daubert* test,” see *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

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- 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
- Plaintiffs' expert's calculation of aggregate shares held admissible, without considering *Motorola* criticisms, in *Blech Sec. Litig.*, 2003 U.S. Dist. LEXIS 4650 (S.D.N.Y. Mar. 26, 2003)
- 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

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- Litigators should be creative in analyzing materiality, causation and damage issues in PSLRA cases
- Effective use of expert witnesses and studies can make a critical difference in the outcome of a securities fraud litigation