Life after *Halliburton*: What Would a "Price Impact" World Look Like?

Robert Bartlett
UC Berkeley School of Law

The “Law Professors’ Brief”

JUSTICE KENNEDY: Can you get to part two of Justice Kagan's question? Which is what is your view of the -- of the consequences if we adopt the law professors' view?

MR. STEWART: I understand the one you're referring to be the one that basically advocated a shift away from analyzing the general efficiency of the market and focusing only on the effect or lack of effect on the -- the particular stock. I don't think that the consequences would be nearly so dramatic. In fact if anything, that would be a net gain to plaintiffs, because plaintiffs already have to prove price impact at the end of the day.

11 CHIEF JUSTICE ROBERTS: Thank you, counsel.

Illustration of Price Impact in *Basic*:

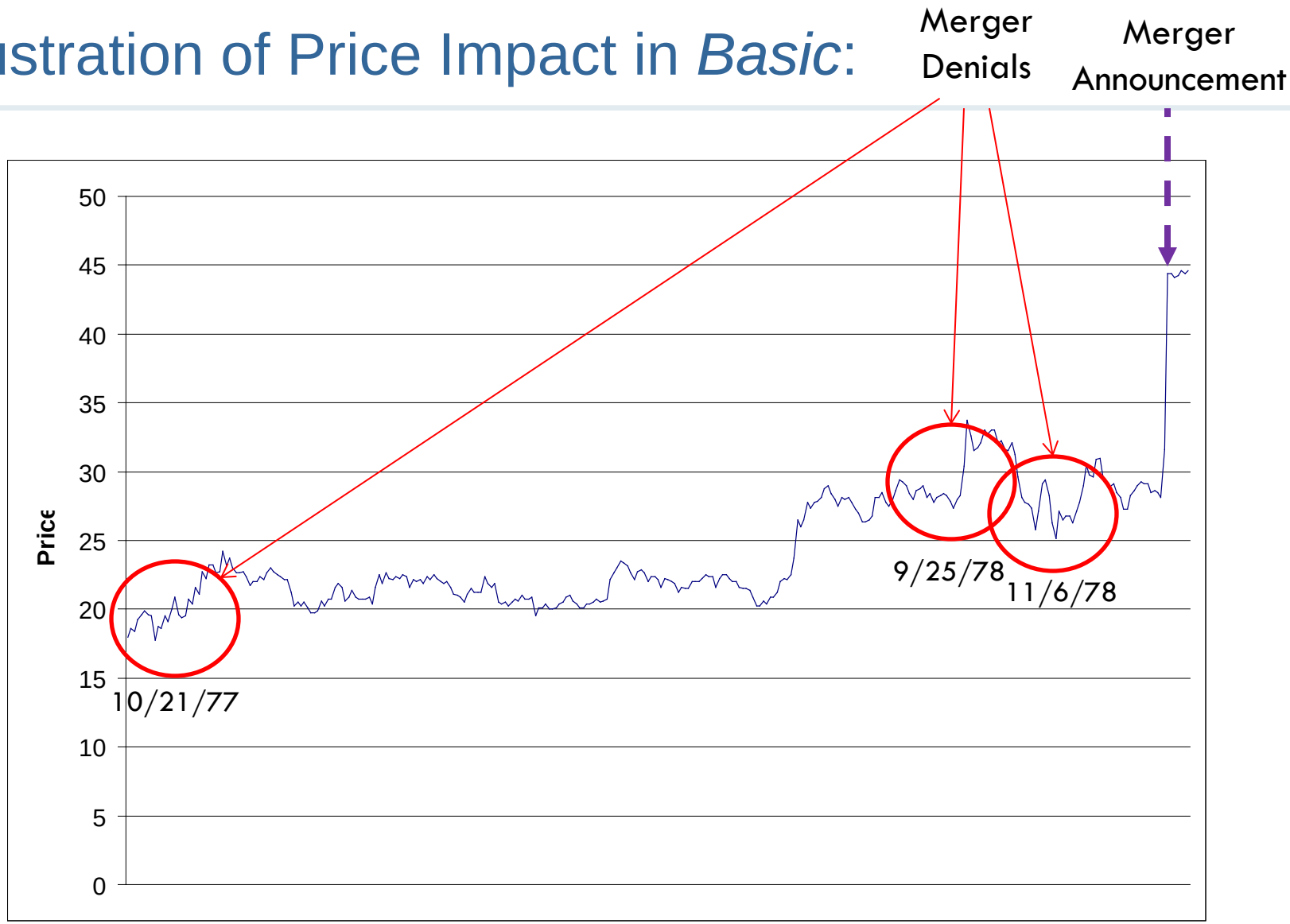


Illustration of Price Impact in *Basic*:

- Basics of an Event Study:
  - Collect daily returns for Basic for an estimation period (*R*) prior to event
  - Collect daily returns for market index (*Mkt*) (and potentially, an industry index, *IND*) for the same period
  - Regress *R* on *Mkt* and *IND* to obtain beta coefficient (β)
  - Use β to calculate abnormal return (*A*) for event date
  - Test for statistical significance

$$R_s = \alpha + MKT_S \cdot \beta_1 + IND_S \cdot \beta_2 + A_s$$

$$R_s = \alpha + MKT_S \cdot \beta + A_s$$

1.38

estimation day	R
-300	-0.0940
-299	0.0548
-298	-0.0067
-297	0.0459
-296	-0.0194
-295	0.0447
-294	0.0428
-293	-0.0617
-292	-0.0128
-291	0.0064
-290	0.0621

Event Day	Mkt	R	Predicted	A	t-stat
-2	-0.02521	0.00000	-0.03582	3.58%	1.427202
-1	0.001702	0.00000	0.001333	-0.13%	-0.05312
0	0.003976	0.33873	0.004472	33.43%	13.31946
1	0.003947	0.00000	0.004432	-0.44%	-0.17662
2	0.013389	-0.00565	0.017468	-2.31%	-0.9212

Challenges of Living with a Price Impact Rule:

- First, how do you properly identify whether there was a price impact?
  - Areas of potential debate in designing an event study:
    - Which date to use?
      - Date of misrepresentation? Date of corrective disclosure?
    - Which return generating process to use?
    - Which index? Which indices?
    - Which statistical inference methods to apply?

Example: Fener v. Belo Corp, 579 F.3d 401 (5th Cir. 2009)

Fener v. Belo

- Allegation:
  - Belo Corp inflated newspaper circulation figures throughout 2004.
  - Corrective disclosure on August 6, 2004.
- Class Certification Motion Filed September 17, 2007

Defense Expert: Paul Gompers	Plaintiff Expert: Scott Hakala
▪ Standard “two pass” CAR model	▪ Integrated regression including dummies for all major “news” dates
▪ Focus on lack of significant return on dates of alleged misrepresentations	▪ Focus on (a) date of corrective disclosure + (b) joint F-test for all relevant misrepresentation dates
▪ Industry index including Tribune	▪ Industry index without Tribune

Challenges of Living with a Price Impact Rule:

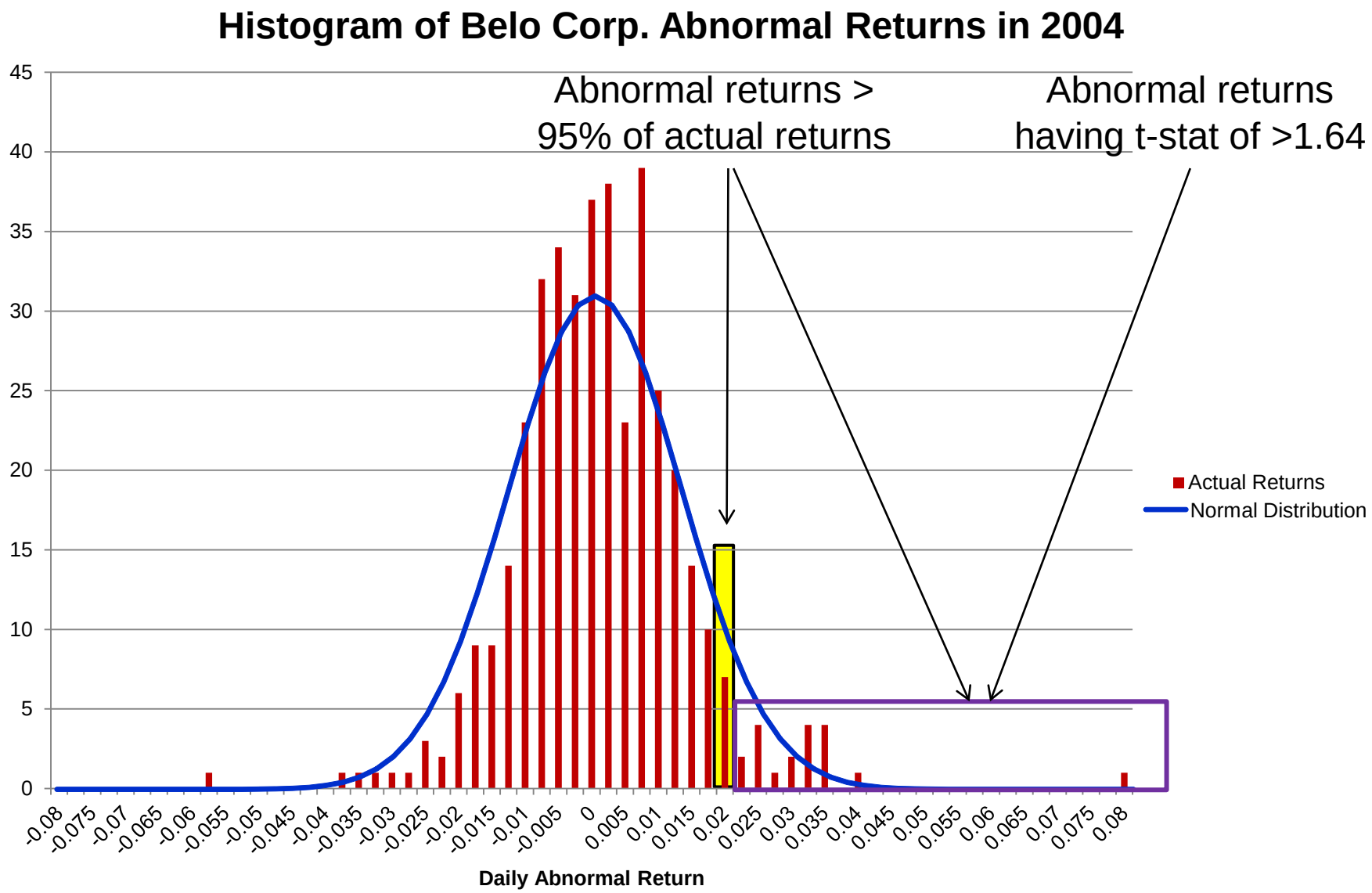
- First, how do you properly identify whether there was a price impact?
  - Areas of potential debate in designing an event study:
    - Which date to use?
      - Date of misrepresentation? Date of corrective disclosure?
    - Which return generating process to use?
    - Which index? Which indices?
    - Which statistical inference methods to apply?

Example: Fener v. Belo Corp, 579 F.3d 401 (5th Cir. 2009)

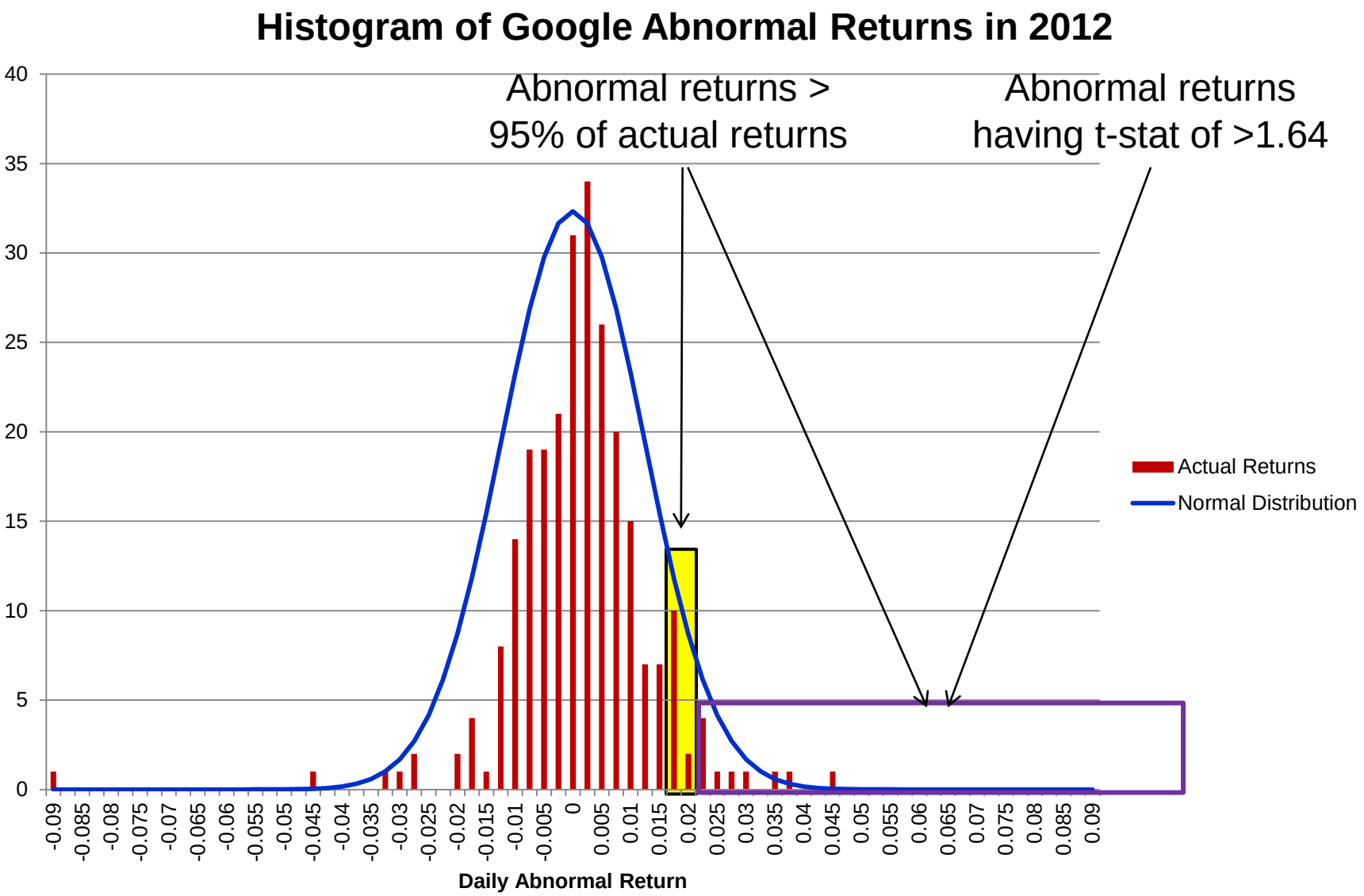
What about statistical inference?

- Debates about the proper method for inferring statistical inference likely to become especially prominent. (See Gelbach and Klick, 2013 for review).

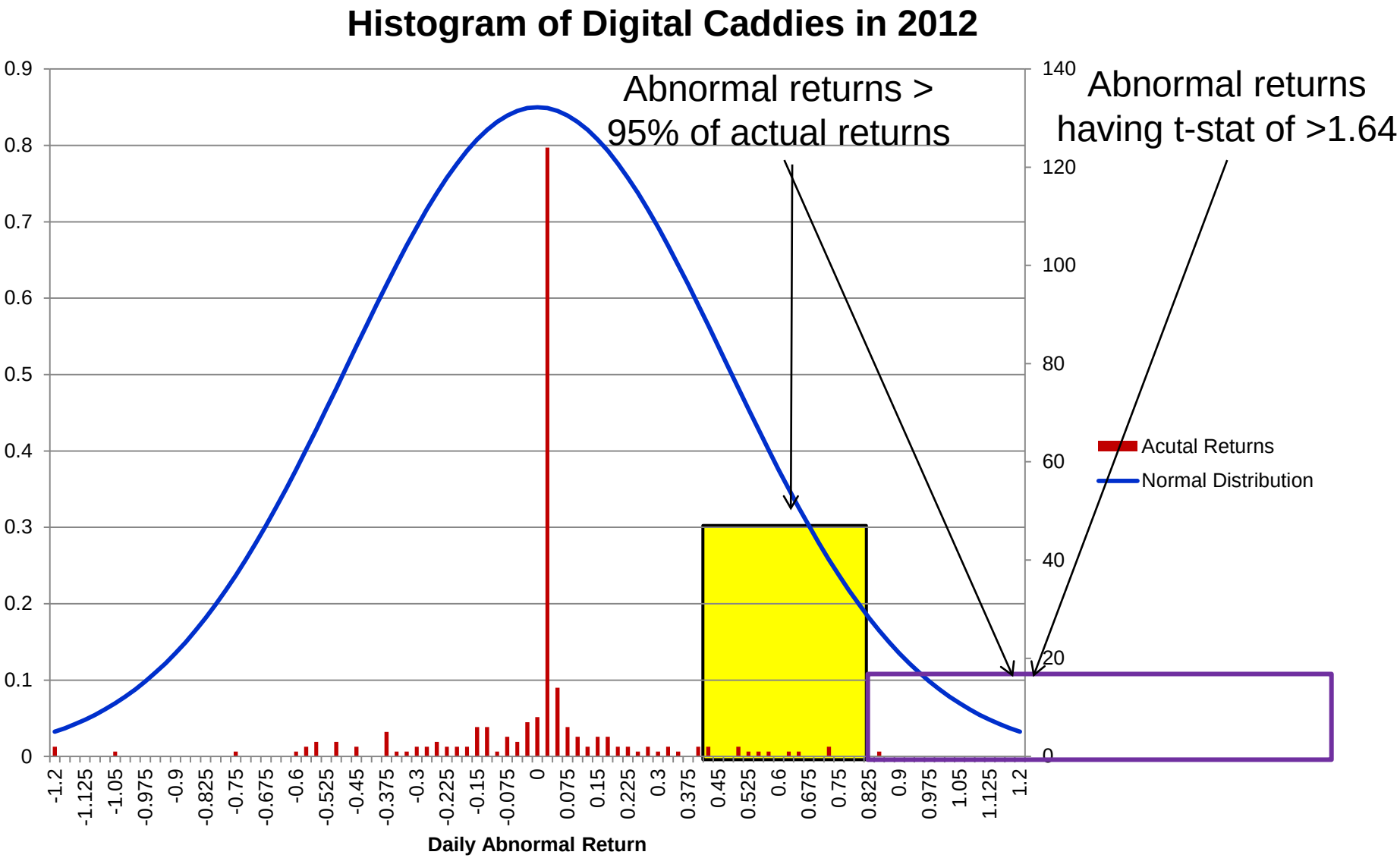
What about statistical inference?



What about statistical inference?



What about statistical inference?



Challenges of Living with a Price Impact Rule:

- First, how do you properly identify whether there was a price impact?
  - Areas of potential debate in designing an event study:
    - Which date to use?
      - Date of misrepresentation? Date of corrective disclosure?
    - Which return generating process to use?
    - Which index? Which indices?
    - Which statistical inference methods to apply?
- Second, even if there is price impact, did the fraud *cause* the price impact?
  - What about collateral effects?
    - We know prices move even when misrepresented information is almost certainly immaterial (e.g., stock option back-dating).
  - What about multiple news events on an event date?
    - Critical issue in *Fener v. Belo* on August 6, 2004 disclosure
    - Pritchard and Henderson→use content analyses
      - *Halliburton I:* "We have characterized such evidence as merely 'well-informed speculation.'"
      - Discounted in *Fener v. Belo* (relied on company assessment of how much misreported circulation figures would affect future growth).
    - Will the need to untangle the effects of multiple disclosures lead to limited discovery requests?
  - What about price effects relating to management integrity?
    - Is it the misstated information that the market is responding to? Or is it the potential for *future* management shenanigans?