A Stake in the International:

US Banks and Basel III Regulatory Announcements

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Motivation

What are the effects of international bank regulations upon firms?

- Puzzle: How *strong* are bank regulatory agreements?
  $\rightarrow$ Regulatory networks & rules-based governance.
  $\rightarrow$ But, soft law.
- Competing theories on international cooperation in banking.
  $\rightarrow$ Cooperation mitigates risk (Kapstein 1989).
  $\rightarrow$ Cooperation benefits strong states' firms (Oatley & Nabors 1998).
- Problem: How to differentiate among mechanisms?
- Solution: Revisit the debate with systematic empirical analysis.
  $\rightarrow$ Renegotiation of intl bank rules (Basel III) in 2009 and 2010.
  $\rightarrow$ Stock returns of US firms when negotiation information is released.

Overview

- Hypotheses:
  → If agreements primarily mitigate risk, banks will be hurt.
  → If agreements increase competitiveness, banks will be helped.
- Findings:
  → US regulated banks experience negative stock returns.
  → Effect size is small.
- Implications:
  → Banks are not advantaged by regulations.
  → US regulators not wholly captured.
  → Weak direct effects of even strongest intl financial agreements.

International Banking Cooperation

- Basel I (1988), Basel II (2004), Basel III (2010).
- Basel Committee on Banking Supervision (BCBS).
  $\rightarrow$ Regulatory "Network" of head banking regulators.
  $\rightarrow$ Established in 1974.
  $\rightarrow$ Membership: 13-14 ctys (1974-2009) to 27 ctys (2009-).
- Rules-based.
- Soft law (non-binding; decentralized implementation).
- Private deliberation, negotiation.
- Public information through press releases.

Basel III and Theories of Cooperation

- What are the effects of clear *increase* in regulatory stringency?
- Risk perspective implies negative effects on banks.
  - Adjustment costs.
    → Raise capital, change asset mix, decrease assets.
    → New internal processes to monitor and report.
  - Ongoing monitoring and reporting.
- Competitive perspective implies positive effects on banks.
  - Regulatory details have favorable distributional effects.
    → Increased minimums will hit European banks.
    → Leverage ratio (new intl requirement) already required in US.

Measuring Regulatory Effect

- Quantity of interest: change in profitability due to regulations.
- Measure: US bank stock returns proxy for regulatory effect.
- Isolate effect of regulations using firm-level, daily estimates.
- What do stock returns capture?
  $\rightarrow$ Investor perception of regulatory impact.
  $\rightarrow$ Strong incentives to act sincerely.

Hypotheses

- Hypothesis 1: If regulations primarily mitigate risk, then new information about regulations will lead to negative bank stock returns.
- Hypothesis 2: If regulations primarily increase domestic competitiveness, then new information about regulations will lead to positive bank stock returns.

Five "Events" Comprise Basel III Negotiation

	Press Release Description	Date
1	Agree to Negotiate	2009 September 7
2	Consultative Proposal	2009 December 16
3	Agree to Finalize	2010 July 26
4	“Calibration" (Minimums)	2010 September 12
5	Final Rules Release	2010 December 17

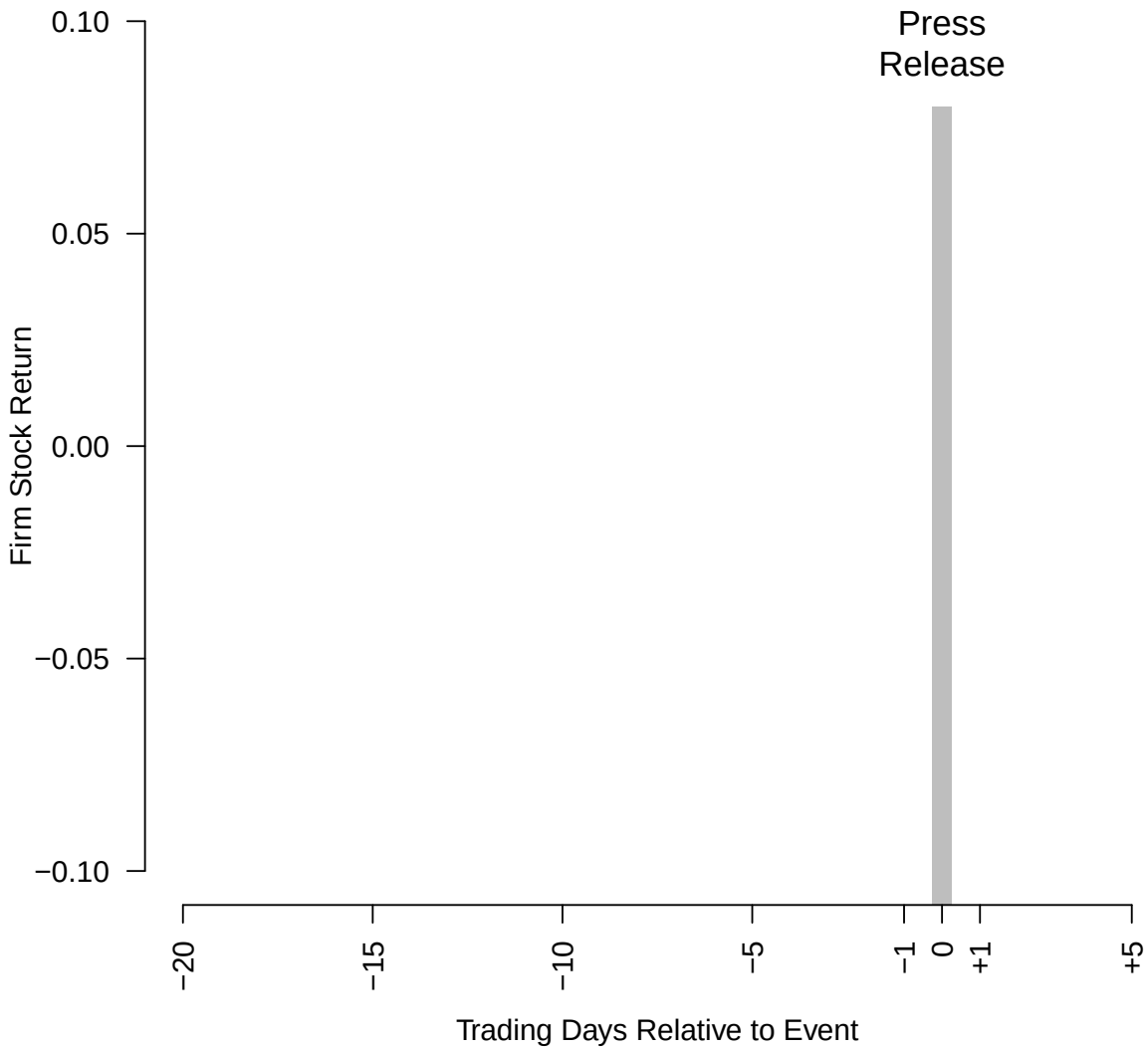
- 2009 September – 2010 December.
- Degree of detail varies across events.
- Cumulative increase in likelihood of stringent regulations.
- Basel III press releases as unexpected treatment.
  $\rightarrow$ Infrequent, opaque negotiations limit anticipation effects.
  $\rightarrow$ Clear observation of new information date and content.

Research Design - Event Study

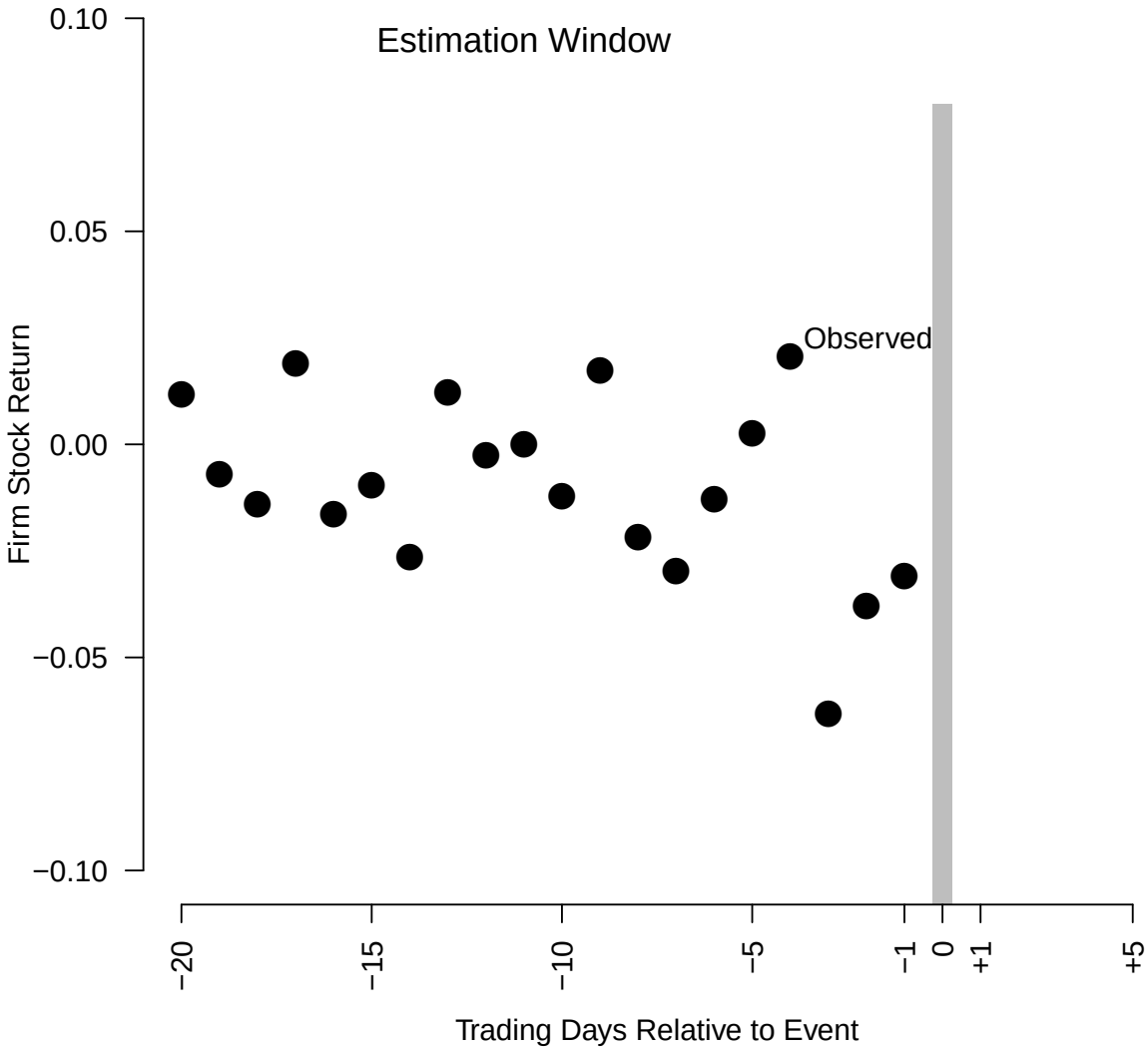
- When new information is released about Basel III regulations, "Do *observed* stock returns and *expected* stock returns differ"?
  → 5 Events: BCBS press releases.
  → Sample firms: 46 US-headquartered, publicly-traded banks.
  → Firm estimations using daily stock data.

- Expected stock return (counterfactual) using lasso estimation.
  → *"For each sample firm for each press-release, what weighted-average subset of 2726 non-financial firm stock returns best approximates the sample firm stock returns prior to the press-release?"*
  → Enables short estimation window (approx regression discontinuity).

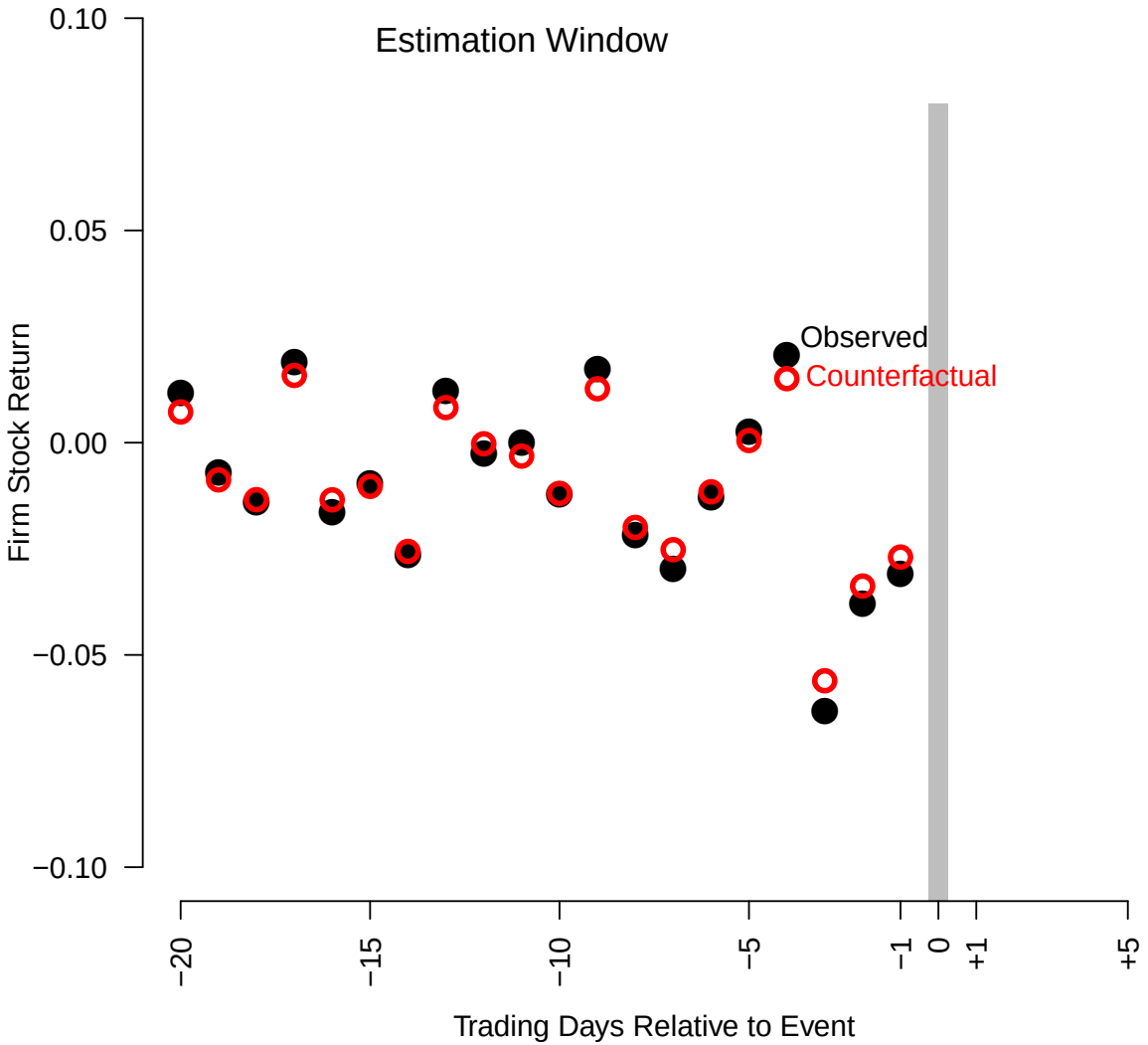
Example - Event 2



Event 2, Citigroup



Event 2, Citigroup



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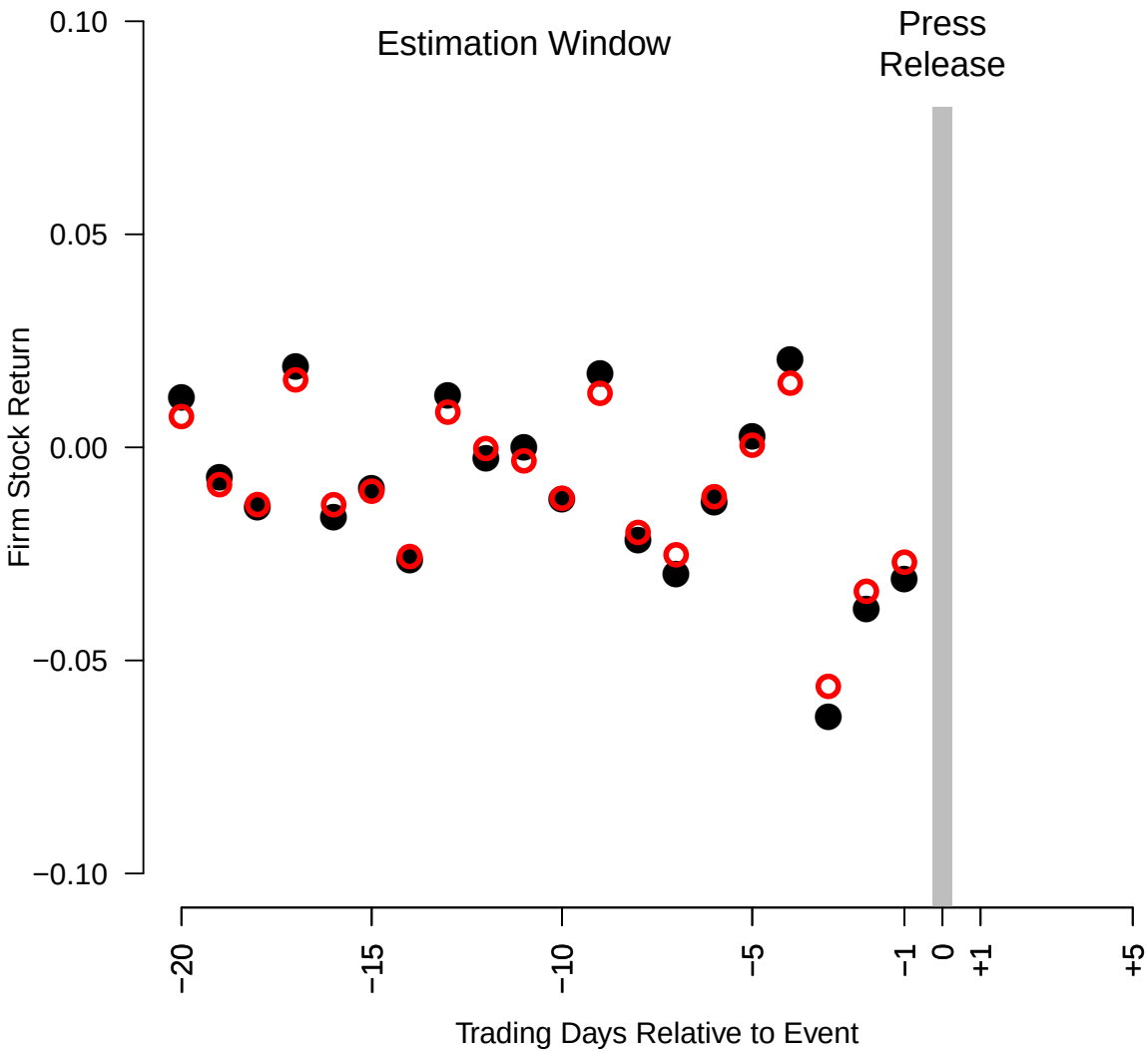

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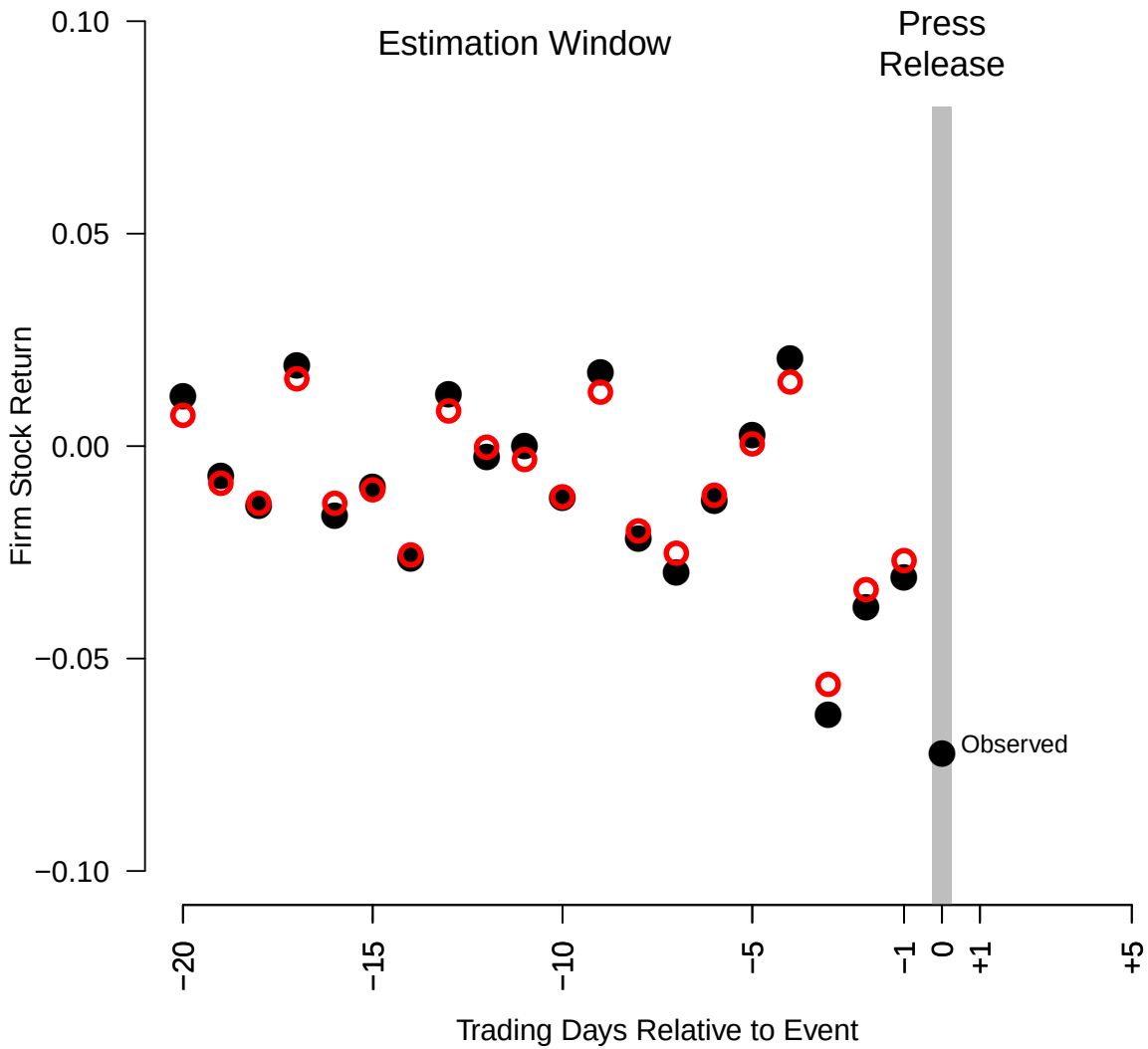

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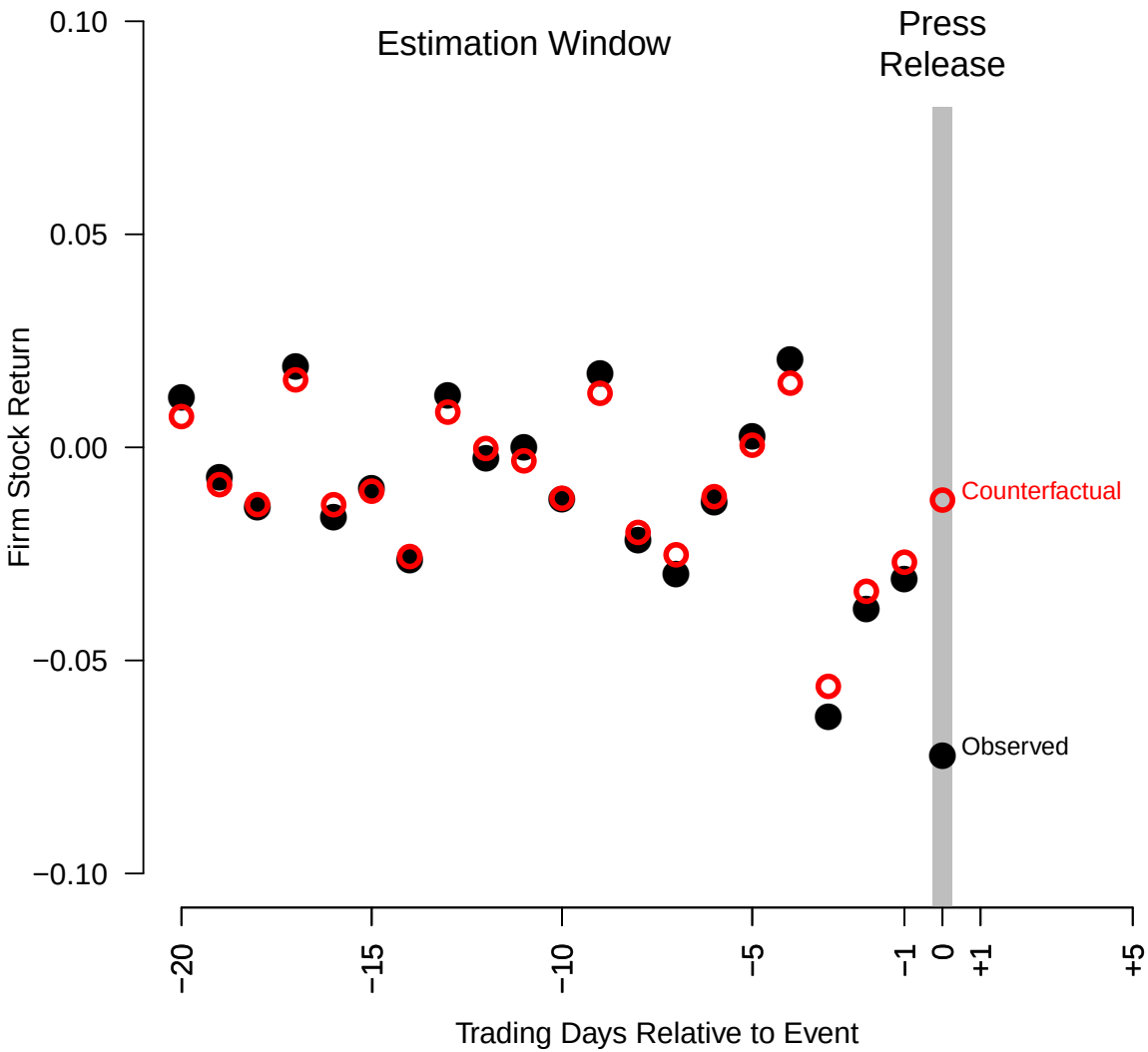
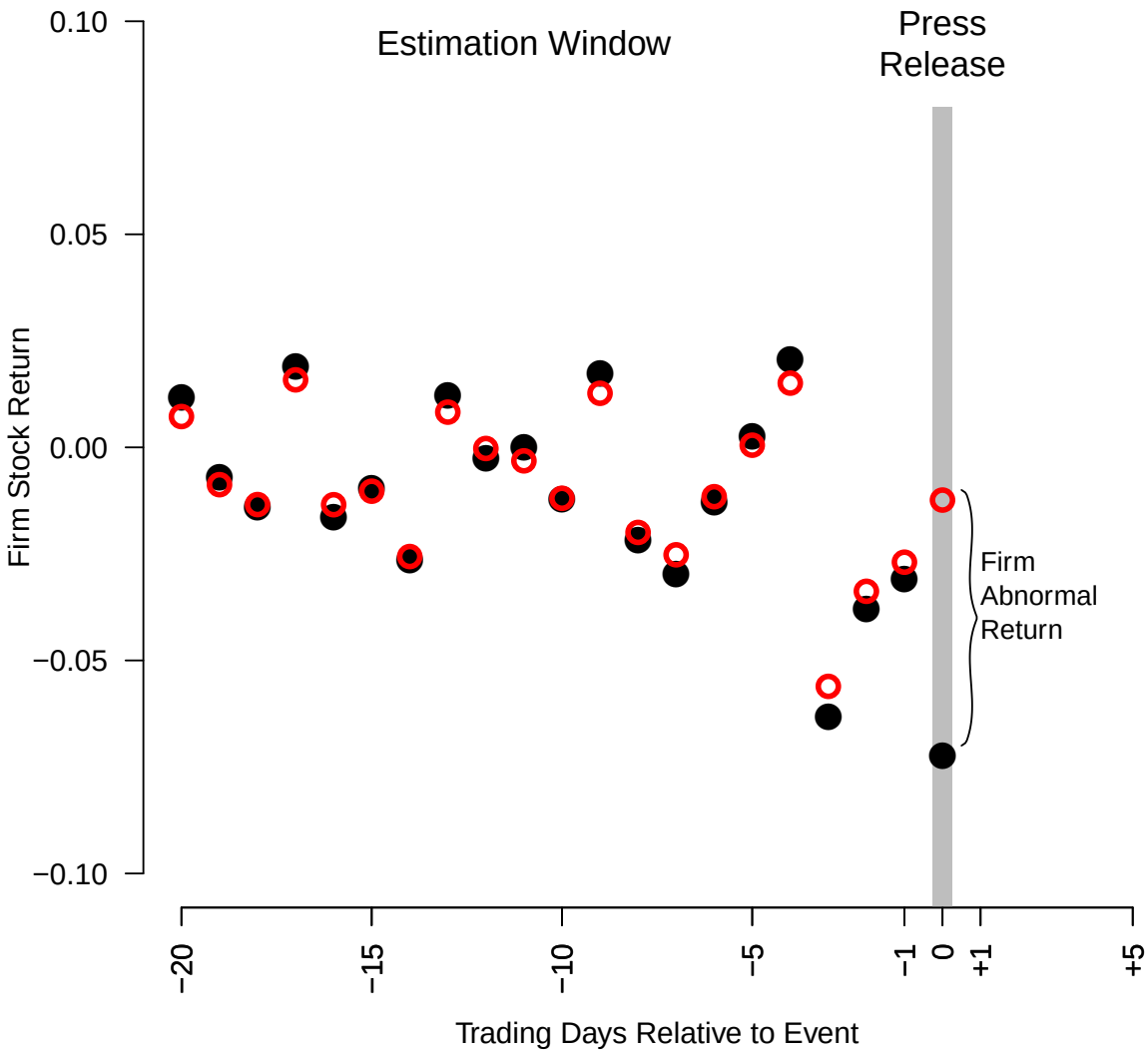
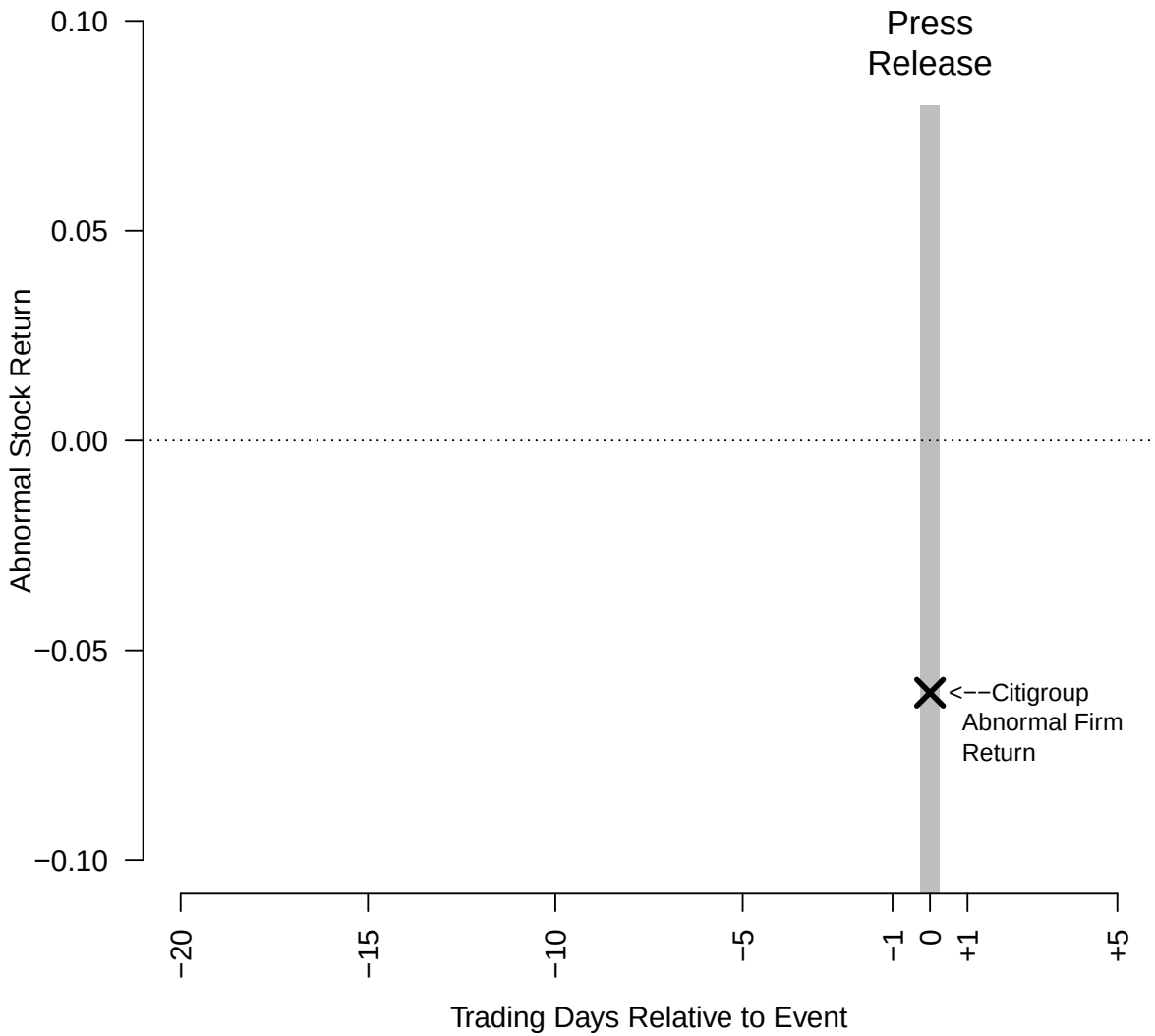


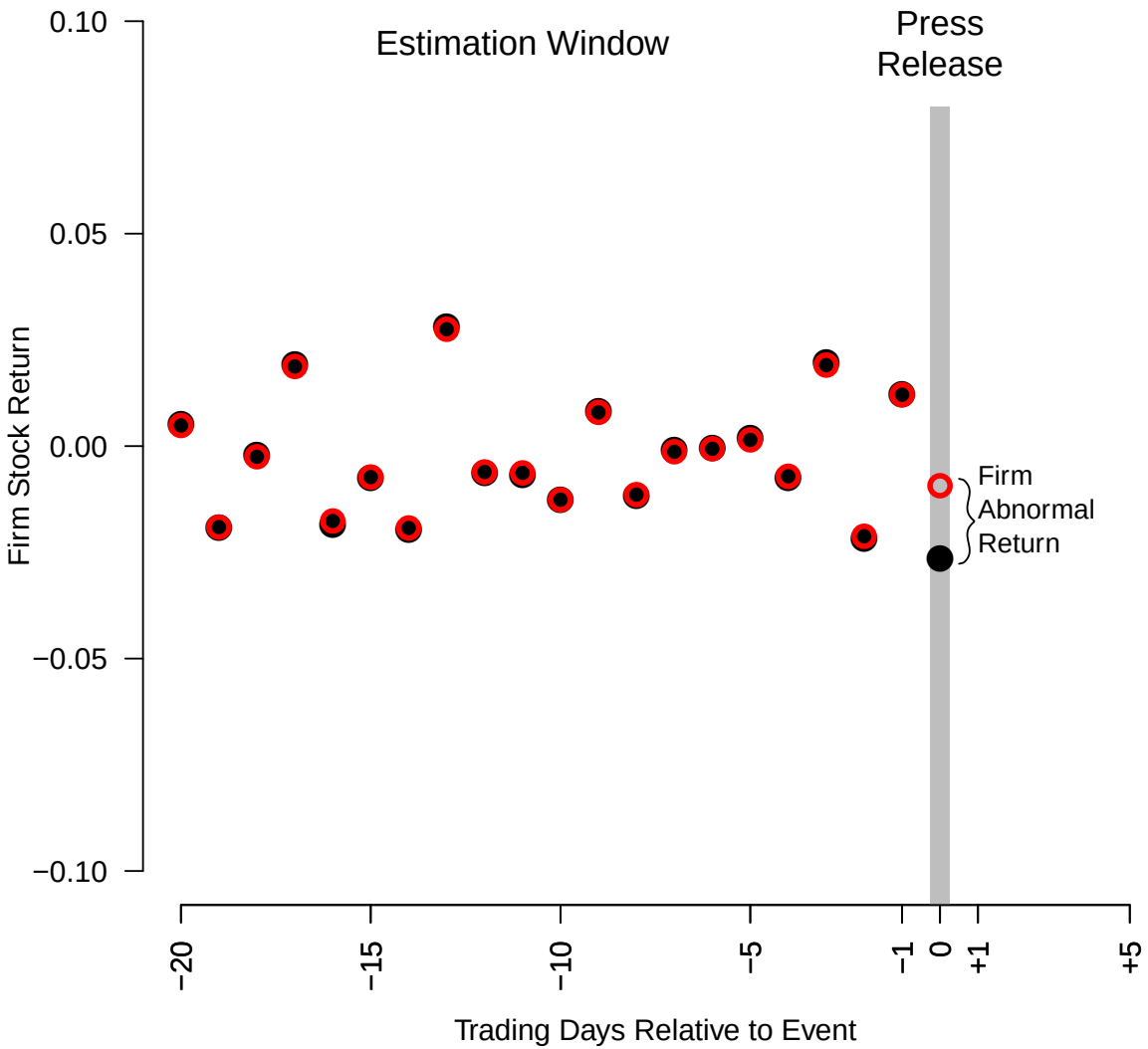
Event 2, Citigroup



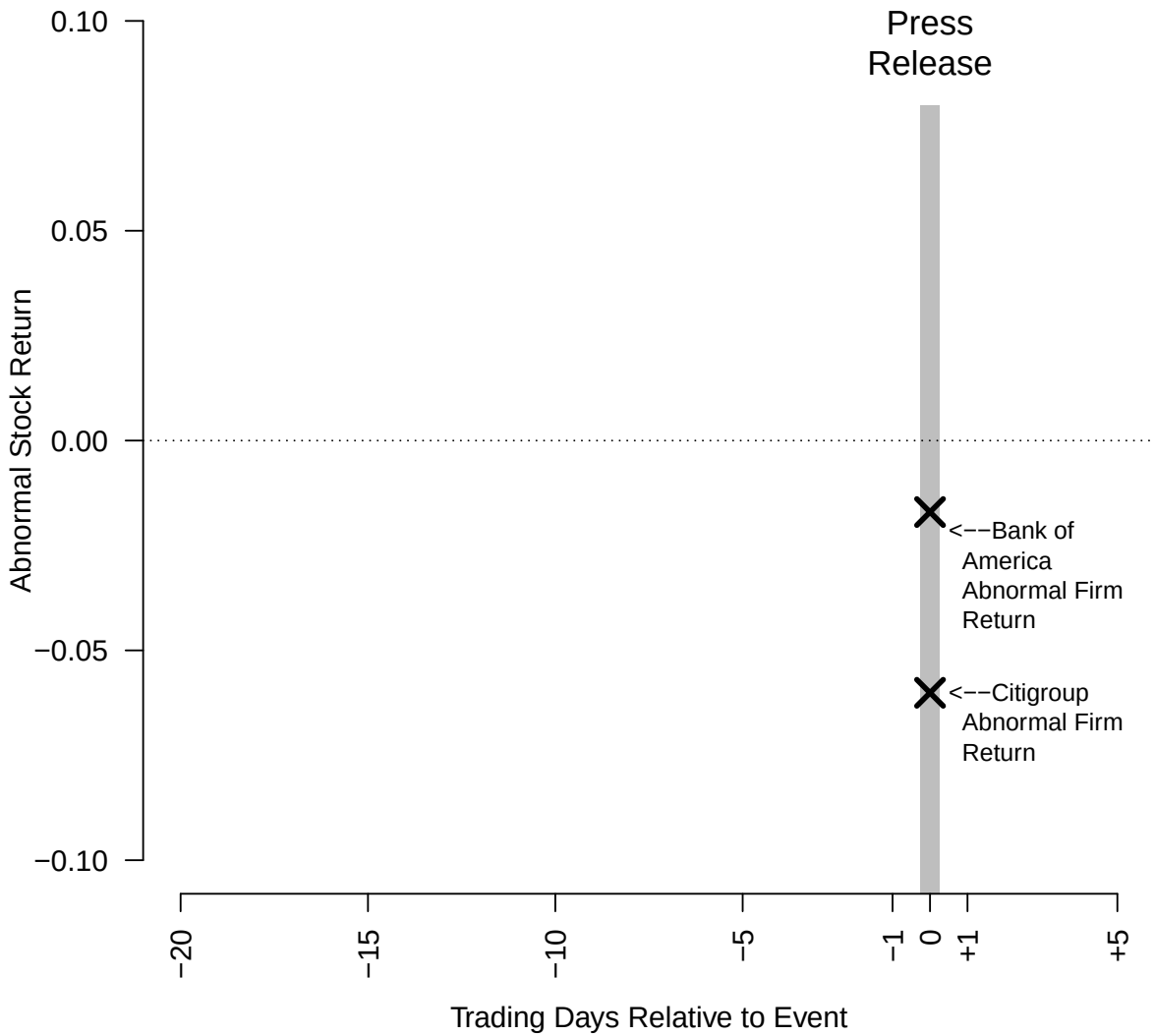
Event 2, Firm Abnormal Returns



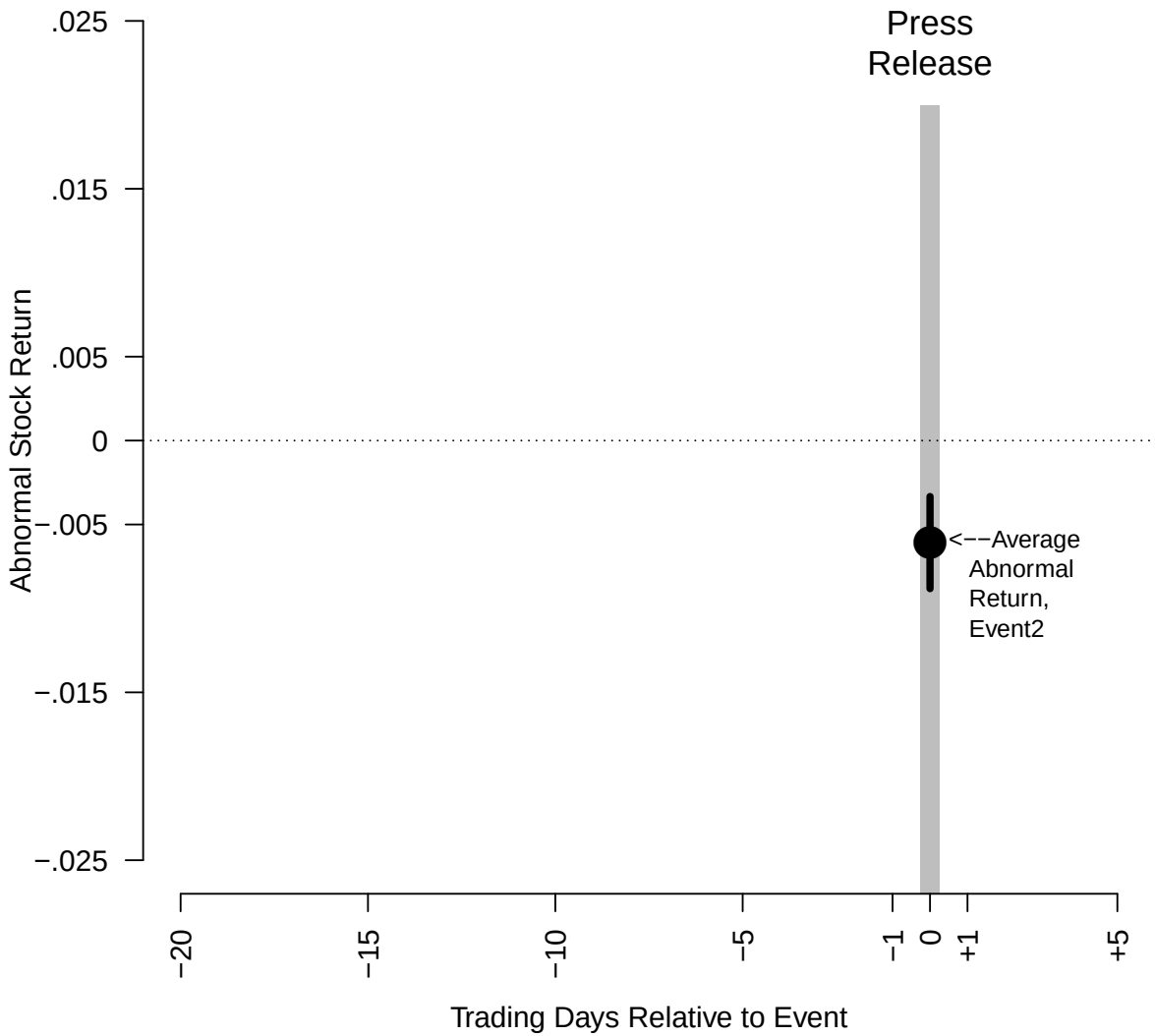
Event 2, Bank of America



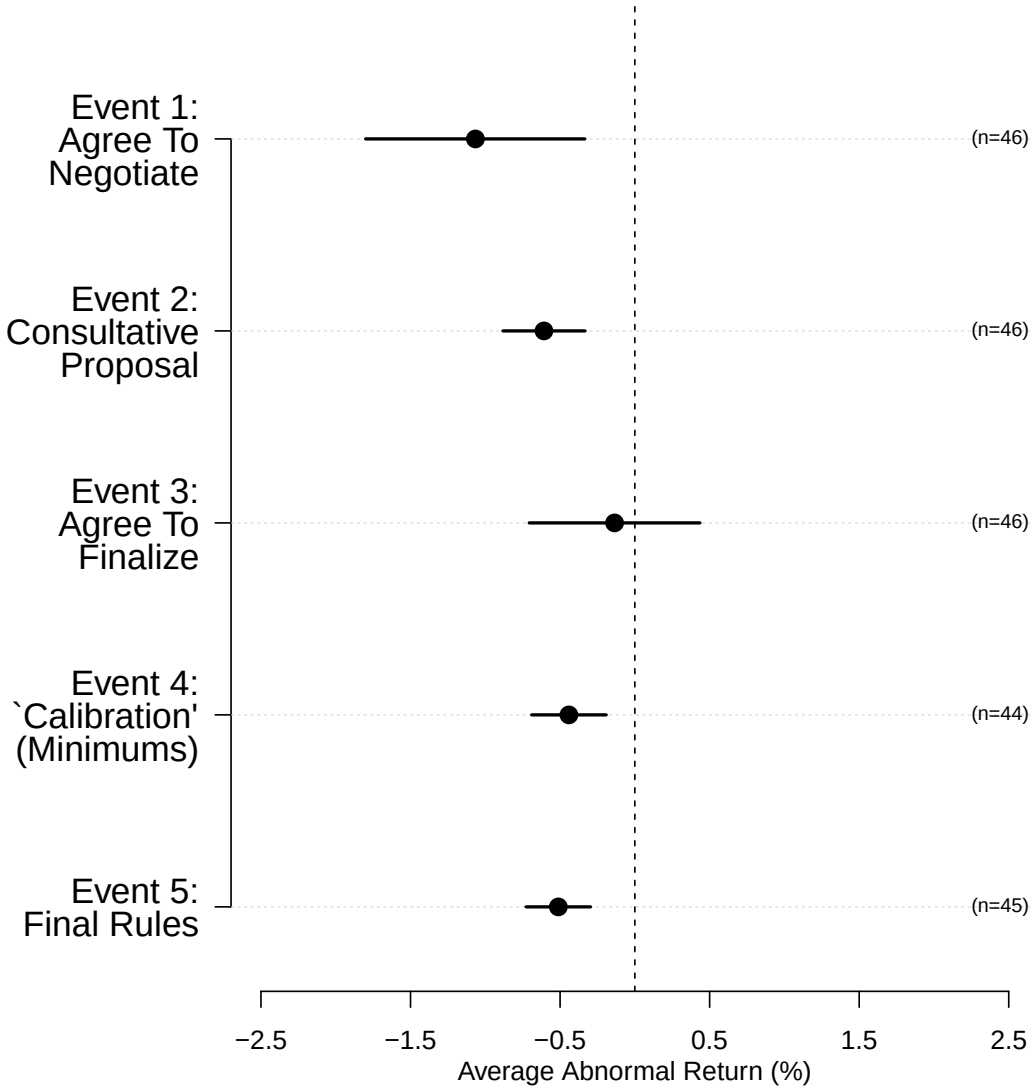
Event 2, Firm Abnormal Returns



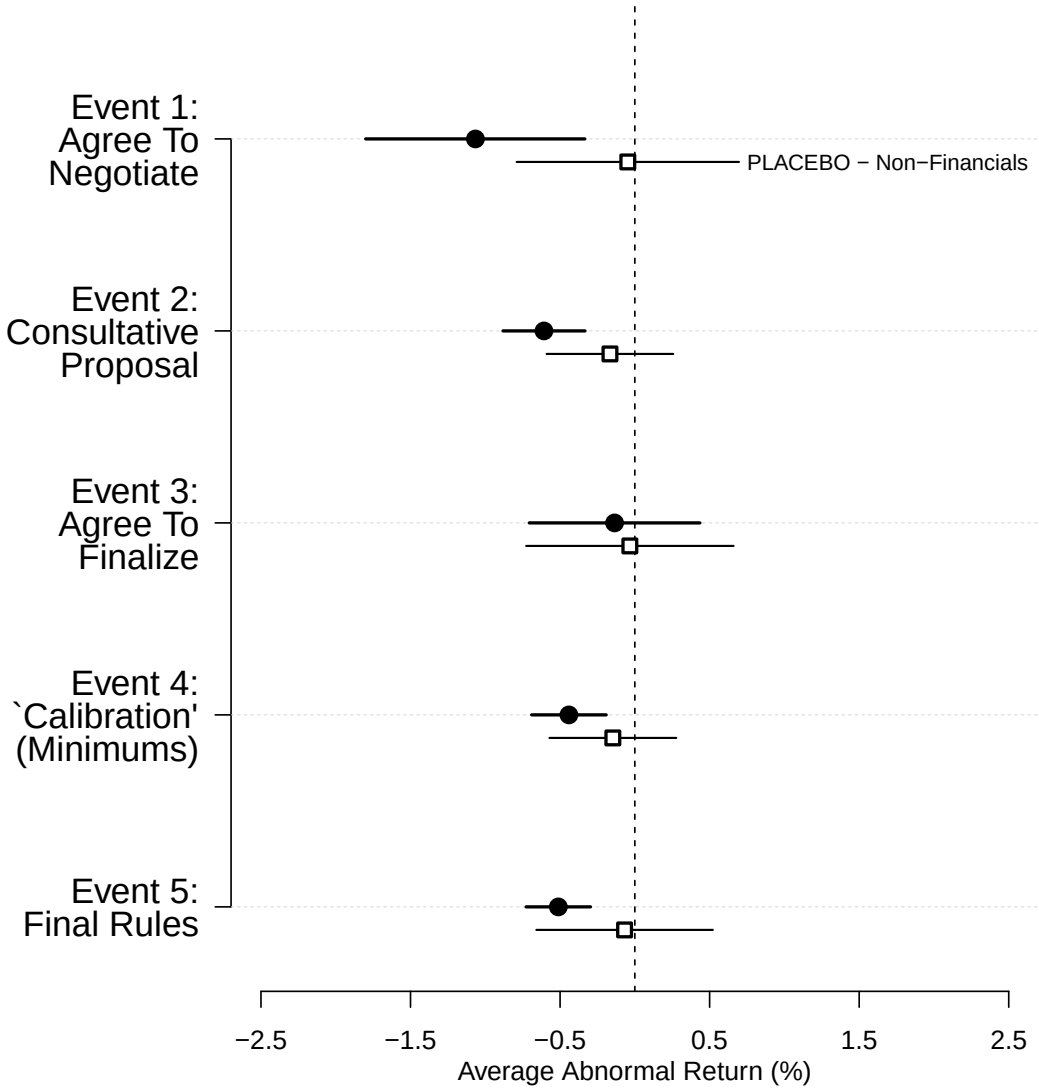
Event 2, Average Abnormal Return



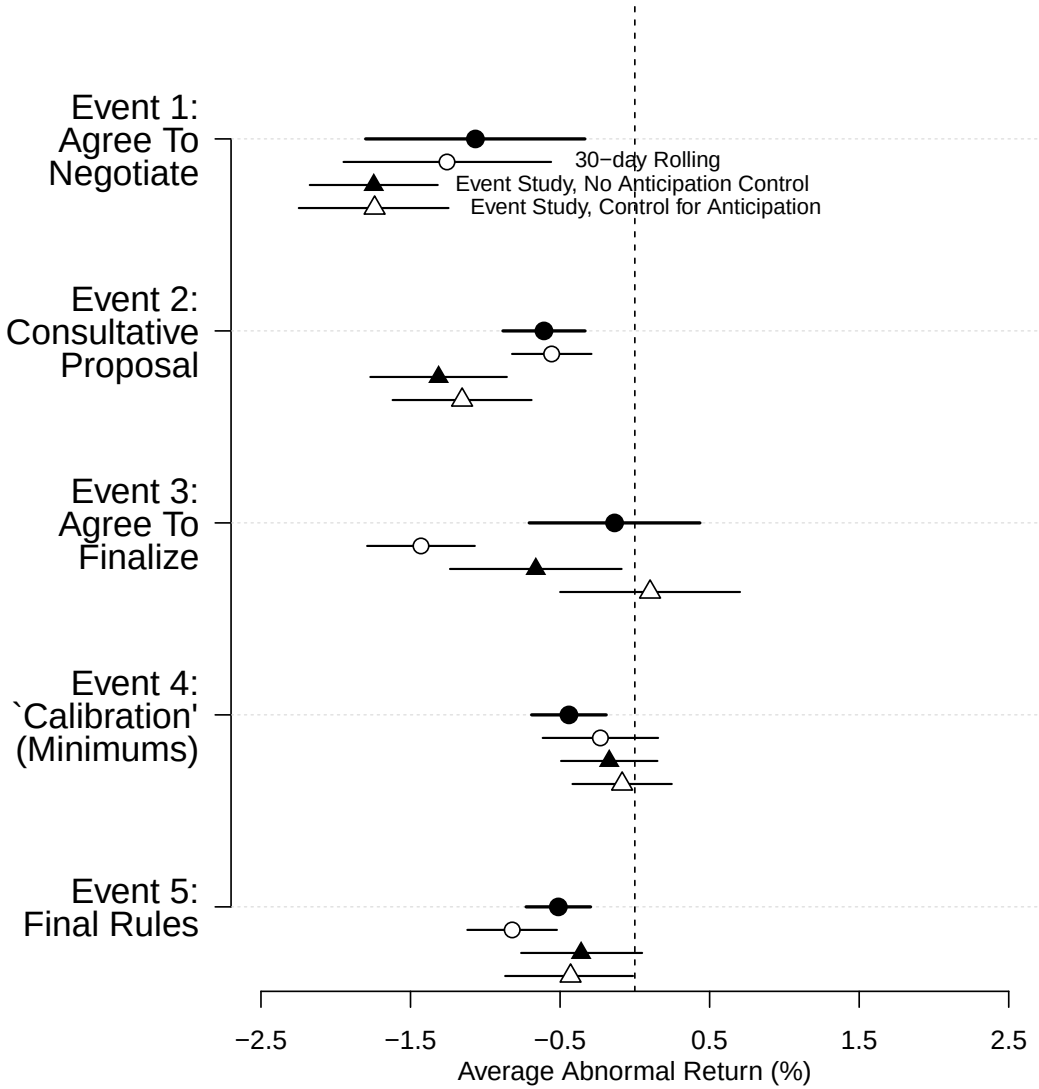
Results - Average Abnormal Returns



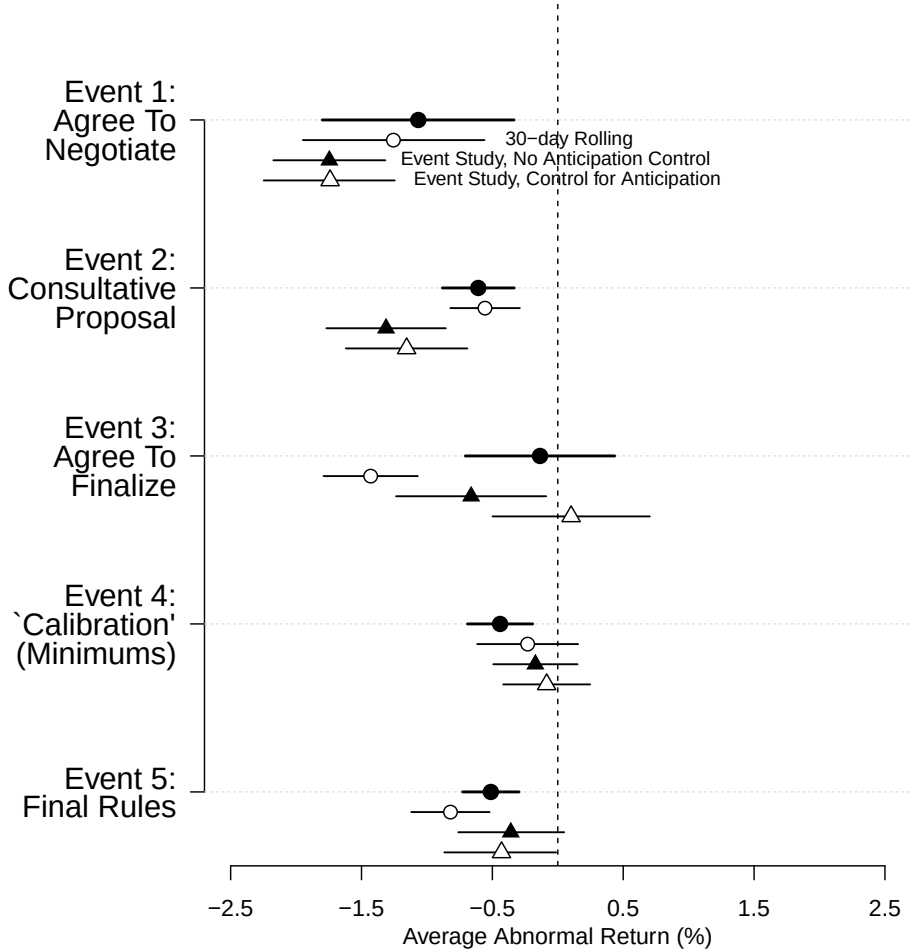
Placebo Test - Non-Financial Firms



Robust - Alternative Estimation Windows

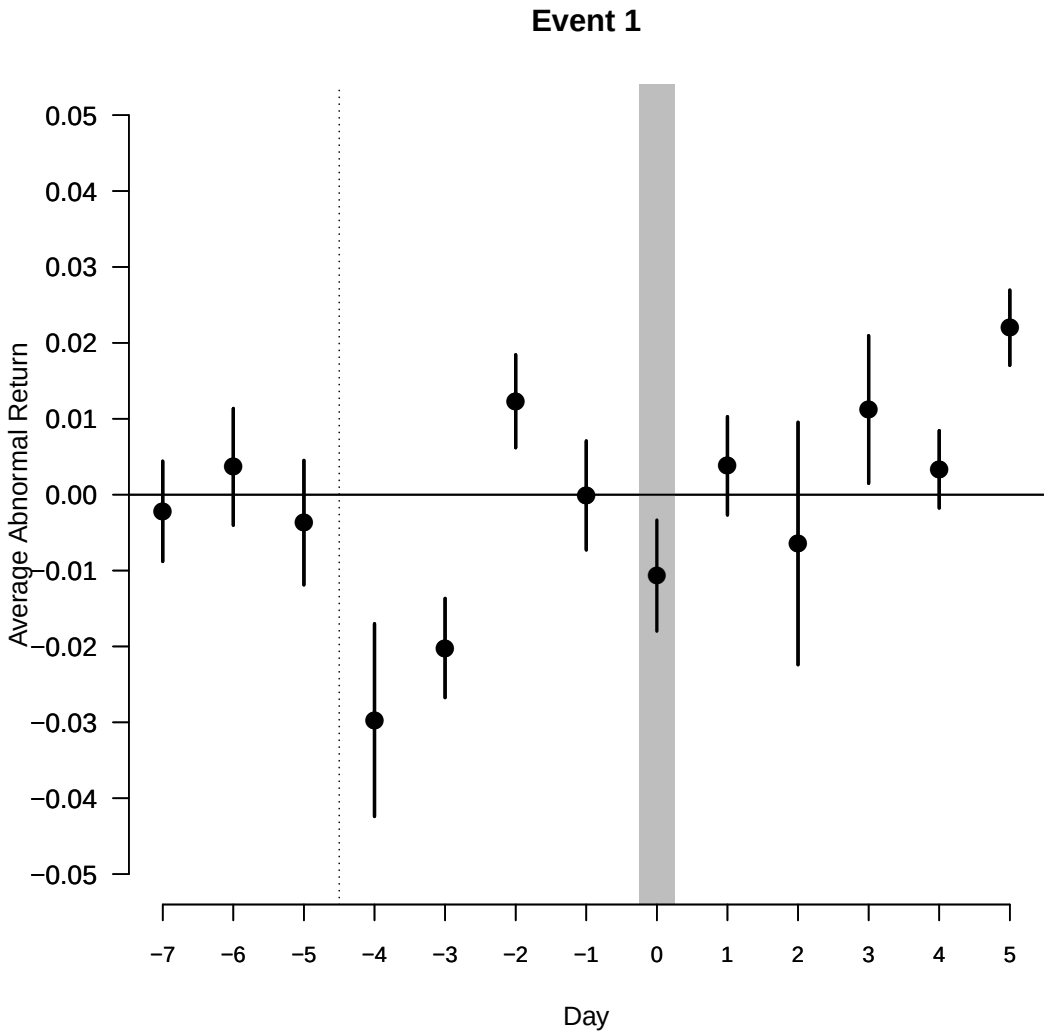


Takeways

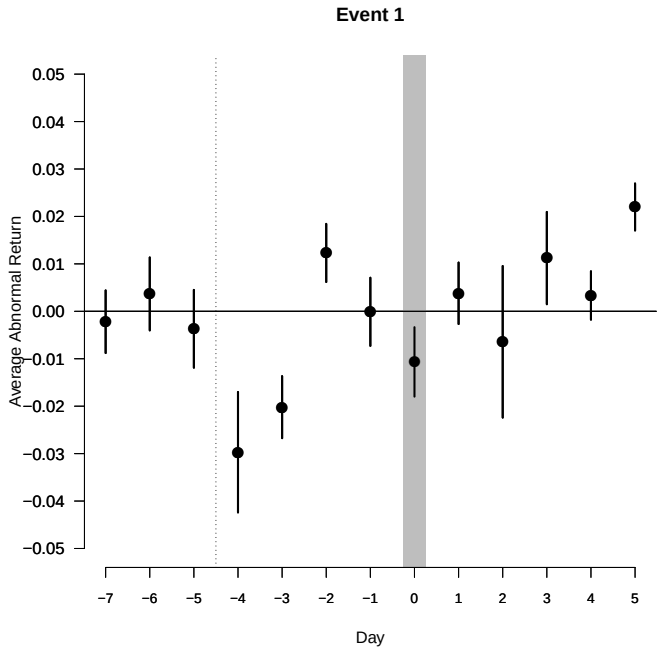


Overall, negative effect of regulations upon banks.
More consistent with regulations mitigating risk.

Magnitude of Average Abnormal Returns



Magnitude of Average Abnormal Returns



Magnitude of effect is small.

Conclusion

- Competing theories imply regulation may harm banks.
- Empirical test establishes:
  $\rightarrow$ US banks were slightly hurt.
  $\rightarrow$ US banks did not benefit.
- Implications:
  $\rightarrow$ In the case of Basel III...
  ...regulators generally prioritized mitigating risk.
  ...US regulators were not wholly captured.
  $\rightarrow$ Stringent international fin regs have small direct effects!