Insider Trading and Innovation

Discussed by

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Overview

- An outsiders starting point on insider trading
- Theoretical suggestions about relationship
- Data generating process and what it can tell us
- A couple comments about the data
- Challenging empirics
An outsiders starting point on insider trading

Demsetz taught us that insider trading may create returns to large stakeholders for taking on firm-specific risk

- Large stakeholders are now funds.
- Do they have inside information?
  - Icahn’s lack of knowledge about Apple’s abandoned TV suggests not

A naive question

- Why shouldn’t firms be able to explicitly allow insider trading?
  - Do not appear to be externalities to other firms, consumers etc.
  - Collective lawsuits difficult so still need central enforcement agency?
Theory of How Enforcement Relates to Innovation

- More efficient stock market valuations may improve incentives to innovate
  - If profits will come, does the firm need the market to know it?
    - Lower costs of capital

- Do stock prices better value firms with or without enforcement?
  - Insider trading quickly reveals information
  - But restrictions improve liquidity and incentivize outsider information gathering.
    - Outsiders may uncover other information, but not if they can easily get burned.

- Other Considerations:
  - Increased liquidity enables short-run profit-seeking activities

- Suggests an empirical question, but most of it answered if we know whether or not insider trading prevention helps or hurts valuations?
How Insider Trading Affects Innovation

- **Data Generating Process**
  - Country $c$ begins enforcement in year $t$
  - Publicly traded firms in $c$ at $t$ are now valued better/worse by the market
  - Incentives to innovate now better/worse

- What were these firms doing before enforcement?
  - Filing on a different country’s exchange
  - Electing not to be publicly traded
    - No IPO could help innovation (Bernstein, 2015)
  - Not filing patents when innovating because legal protection was generally worse
    - Global legal standards may be more relevant for this
    - But when was first local infringement violation?

- Is this more patenting by the same firms or a change in the types of firms?
  - If changing firms, where were these firms before?
  - Were there other changes that lured these innovative firms?
Clarity on how country is defined for patenting

- How are multinationals handled?
- Do companies file on foreign exchanges and if so, should that be the appropriate country assignment?

Should this be filings by only publicly traded firms?
Challenging Empirical Task

- Cannot randomly assign enforcement of insider trading laws
  - What is the ideal experiment? Randomize firms, industries, countries?
  - Spillovers across firms, industries or countries would make this difficult even if we could

- In what ways can we observe variation in enforcement?
  - Ever enforced or not: across countries and time
    - Could legal system could go backward in priority for insider trading
    - Could be variation in level of enforcement, but finer variation potentially more endogenous?

- Regressions across country and time can be tricky
  - Are other things changing in these countries at the same time?
  - Can test for these things, but apparently helpful tests might be harmful
    - If enforcement increases patenting, that should improve economic outcomes.
    - If these outcomes are not affected, patenting looks bad.
    - If these outcomes also improve, maybe institutions are just generally more efficient
  - Everything not included must be uncorrelated with outcomes and timing
    - They really do include a lot, but how many other ways might industries differ across countries and years
A Couple Suggestions

- 94 countries/economies each in a pre vs. post period
  - Extra observations come from 30 years and many industries
  - How does this look with just the 94 * 30 observations?
    - Clustering should be accounting for this
  - Hazard model of enforcement is run at this level

- What would confound risky/opaque industry interactions?
  - Are countries with certain industries more likely to enforce early?
    - In Table 3, include fraction of risky or opaque industries as share of total GDP
Thanks!

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