Discussion of “Interlocking Directorates, Competition, and Innovation”

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Summary

- **Horizontal directors**
  1. **increase firm valuation** by steering innovation **away from competition**, and
  2. **reduce redundancy**, increasing **innovation quantity and quality**.

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- **Horizontal directors**
  1. **increase firm valuation** by steering innovation **away from competition**, and
  2. **reduce redundancy**, increasing **innovation quantity and quality**.
- An insightful analysis of the **interplay between innovation and competition**
  - Simple model with horizontal directors ties innovation and competition outcomes together
  - Interesting combination of data sources on director links and innovation
  - Clever use of mergers as exogenous shocks to director interlocks
  - Empirical results with surprising (to me!) magnitudes
    - 3 percentage points for returns
    - 17% for innovation quantity (i.e., patents)
    - 30% for innovation quality (i.e., stock market value of patents)

Main Driving Forces of the Model

- Firms take costly draws from distribution to find innovation.
  - Innovation success is probabilistic and depends on distance from other firm.
  - Each firm cannot control where draws will land relative to other firm.
  - Only one firm is awarded a patent when the draws are close to each other (innovation duplication).
- **Common director allows firms to coordinate.**
  - Draws from random distribution can now be more focused.
  - Maximize probability of success for **both firms** by locating draws at opposite ends.
  - Firms now take **fewer draws**, but innovation success is **more frequent**.
- Higher firm profits and innovation output due to textbfstrategic avoidance of innovation competition

A Few Small Issues with the Model

- Some **critical assumptions** that make the setup work
  - Competition is simple as firms only make **R&D intensity decision**.
  - Post-innovation competition (e.g., pricing) is **fixed and unaffected by director links**.
  - Firms **do not explicitly choose** innovation location or direction, but common director can limit set of locations.

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  - Competition is simple as firms only make **R&D intensity decision**.
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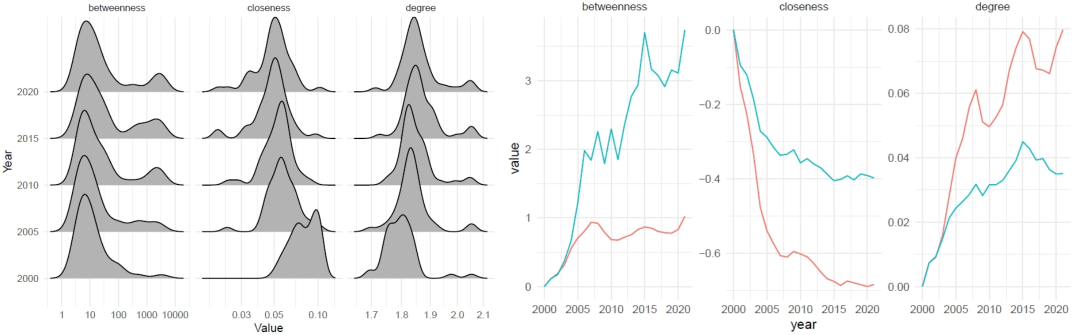
  - Firms **do not explicitly choose** innovation location or direction, but common director can limit set of locations.
- Why is there **no formal proof or proposition** anywhere in the paper?
- What happens when firms have **multiple successful innovations**?
- Why aren't firms allowed to choose innovation location **without the common director**?
- Post-innovation pricing competition would **reverse some of the results**.
  - Common director would like to induce less competitive pricing between firms.
  - Ederer and Pellegrino (2024) argue that this would induce firms to locate more closely.
  - But it's perfectly fine to assume that **director influence on pricing is limited** because of organizational hierarchies (Antón et al., 2023).

Fascinating Network Analysis of Director Links



Some Empirical Observations

- Mergers provide exogenous variation with a **credible identifying assumption**.
  - Firms are obviously not randomly chosen for acquisition, but it's highly unlikely that they're chosen with director links in mind.
  - But maybe with innovation distance in mind? Possible, but unlikely.
  - Director deaths have similar results and it's hard to argue with those.
  - This only allows measuring the effects of **severing director links**.
  - Up-to-date on DiD literature

- How large is the technological proximity effect (3% in Figure 6.1?) compared to **other estimates** in the literature on technological proximity?

More Empirical Observations

- What about R&D **inputs** (e.g., expenditure) rather than **outputs** (e.g., patents and value of patents)?
  - Theoretical model distinguishes between those as draws and successes.
  - But presumably difficult to find information on expenditures by CPC codes.
- Can one disentangle the effect of directors on **innovation success** and **patenting success**?
  - Is the effect the same in more or less crowded innovation areas?
  - Not all patent markets are winner-take-all.
- Common directors acting as **information conduits** is an interesting interpretation.
  - Should this be more pronounced for directors who understand innovation (e.g., those with more experience or science background)?
  - Very similar in style (and results!) to Li et al. (2023) and Eldar and Grennan (2024)

Conclusion

- **Creative and insightful paper**
  - A new channel that influences the direction and success of corporate innovation
  - But even more so another piece of evidence on how much director links have grown over time and how important they can be for firm strategy.

- I encourage **everybody** with an interest in innovation or common ownership to read it.

Thank You!

References I

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