

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 **strategic avoidance of innovation competition**

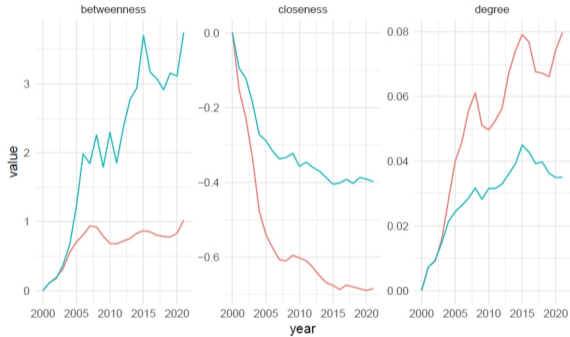
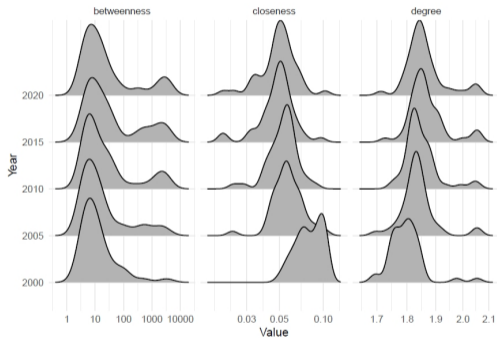
A Few Small Issues with the Model

- 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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 - ▶ 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 have winner-take-all structure.
- 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.

A stylized illustration of a man in a grey suit and glasses sitting at a desk in a control room. He is looking at a computer monitor that displays a menu with the following items: "Economic Survey", "Economic Survey", "Economic Survey", "Economic Survey", "Economic Survey", "Economic Survey", "Economic Survey", "Economic Survey", "Economic Survey", "Economic Survey". The room is filled with many other monitors displaying data. The text "Thank You!" is overlaid in the center of the image.

Thank You!

References I

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- Li, Xuelin, Tong Liu, and Lucian A. Taylor**, “Common Ownership and Innovation Efficiency,” *Journal of Financial Economics*, 2023.