Rising Markups, Common Ownership, and Technological Capacities

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1. Introduction

Q: What is the effect of common ownership by institutional investors on firm-level innovation and markups?
A: Pro-competitive effects on innovation, anti-competitive effects on markups.

Definition Common Ownership: Overlapping institutional investors owning shares of competing companies
Strategic incentives change due to rival profit internalisation through shareholder value maximisation.

Institutional investors held on average around 40% of Western European countries' GDP in assets under management in 2018 (OECD, 2019). Rise of common ownership (Backus et al., 2019), simultaneous sharp rise of firm markups (De Loecker et al., 2020).

- Anti-competitive effects on prices, output, productivity, market entry (Azar et al., 2018, Xie and Gerakos, 2020, Antón et al., 2022).
- Increased innovation, diffusion of innovation (López and Vives, 2019, Kostovetsky and Manconi, 2020, Antón et al., 2021).

2. Theoretical Predictions

Theory (López and Vives, 2019) predicts effects on innovation/cost-reducing R&D

Profit internalisation (common ownership)
Cartelisation effect decreases output

- Lower overall gain of innovation.

Spillover effects
R&D benefits rivals

- Lower incentives to innovate.

→ **Profit internalisation + spillover effects**
Innovating firms internalise competitors' *spilled over* marginal cost reduction

- Sufficiently high spillovers: Positive internalisation effects on innovation > reduced incentives to innovate due to lower output
- Increased incentives to innovate.

3. Data and Empirical Strategy

Data

Accounting, ownership, patent data
Amadeus (BvD) 2005-2016 firm panel
Technological spillovers
Bloom et al. (2013) industry average

Method

Production function estimation
(ACF, 2015) + markups (DLW, 2012)
Propensity score reweighting
Linear count data model

Treated markets

- First exposure to common ownership.
- Directly and indirectly affected firms.

Control markets

- Never any common ownership links.

4. Results

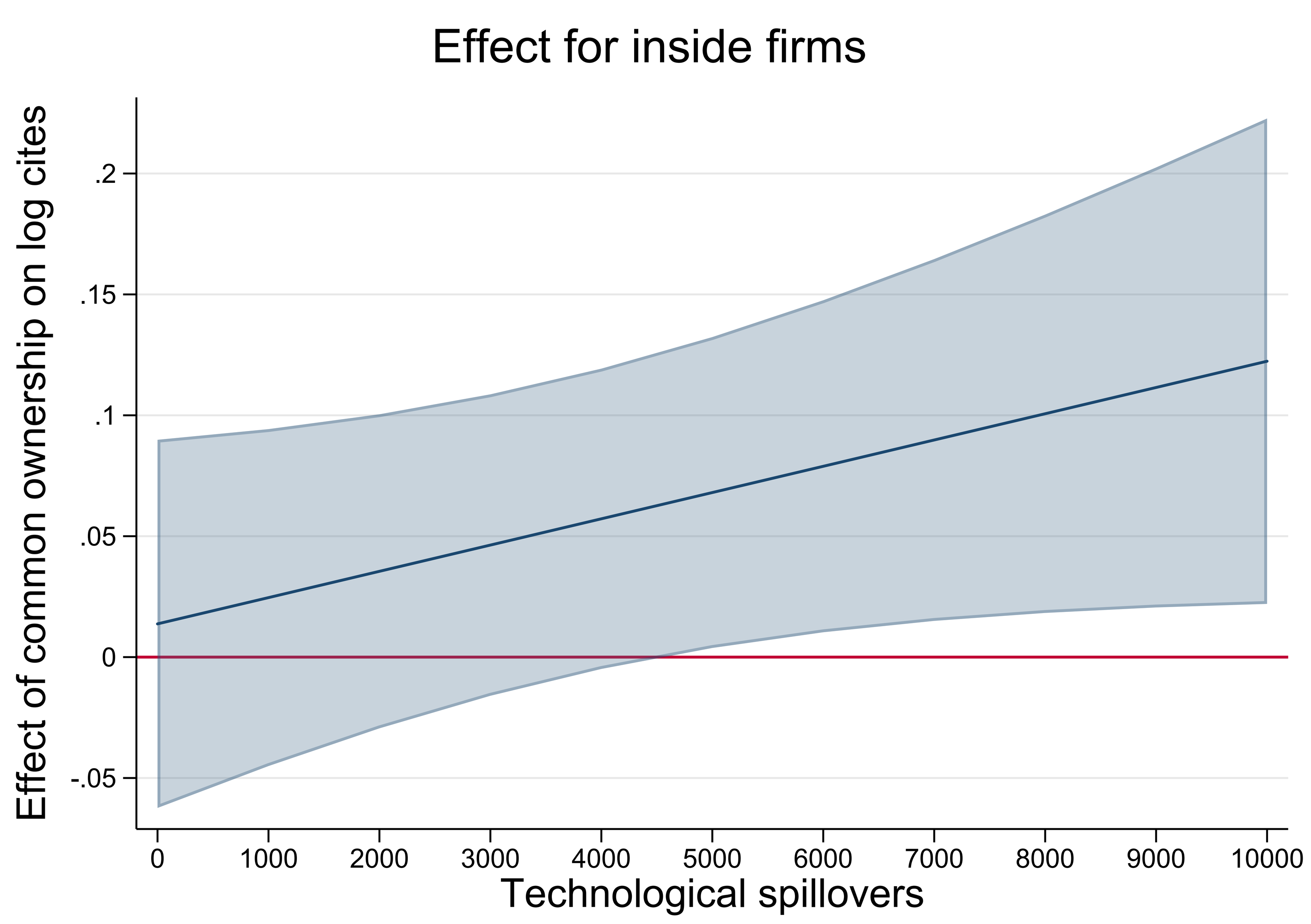
Inside firms Firms that directly share common owners with competitors.
Outside firms No direct ownership links, but competing in same market.

Effect of common ownership on innovation

- No average effect.
- Inside firms: Up to 8.8% increase in patent citations für higher CO concentration (MHHI delta).
- Outside firms: No effect.

Interaction with technological spillovers

- No average effect.
- Inside firms: Effect increasing in the degree of technological spillovers.
  Up to 9.5% increase in fourth quartile of spillovers.
  Up to 20% increase in high-tech industries (EC definition).
- Outside firms: Insignificant, slightly negative and decreasing with spillovers.



5. Conclusions

Common ownership, innovation, markups on broad European manufacturing sample.

- Pro-competitive effects on innovation, increasing in technological spillovers:
  Common ownership increases patent citations for firms directly commonly owned.
- Pronounced cartelisation effect on markups, increasing in technological spillovers.

References

Ackerberg, D. A., Caves, K., and Frazer, G. (2015). Identification Properties of Recent Production Function Estimators. *Econometrica*, 83(6):2411–2451.
Antón, M., Ederer, F., Giné, M., and Schmalz, M. C. (2021). Innovation: The Bright Side of Common Ownership? *SSRN Electronic Journal*, pages 1–41.
Antón, M., Ederer, F., and Schmalz, M. C. (2022). Common Ownership, Competition, and Top Management Incentives. *Working Paper*, pages 1–111.
Azar, J., Schmalz, M. C., and Tecu, I. (2018). Anti-Competitive Effects of Common Ownership. *Journal of Finance*, 73(4):1–79.
Backus, M., Conlon, C., and Sinkinson, M. (2019). Common Ownership in America: 1980-2017. *NBER Working Paper*, 25454:1–56.
Bloom, N., Schankerman, M., and Van Reenen, J. (2013). Identifying Technology Spillovers and Product Market Rivalry. *Econometrica*, 81(4):1347–1393.
De Loecker, J., Eeckhout, J., and Unger, G. (2020). The Rise of Market Power. *Quarterly Journal of Economics*, 135(2):561–644.
De Loecker, J. and Warzynski, F. (2012). Markups and Firm-Level Export Status. *American Economic Review*, 102(6):2437–2471.
Kostovetsky, L. and Manconi, A. (2020). Common Institutional Ownership and Diffusion of Innovation. *SSRN Electronic Journal*, pages 1–52.
López, Á. L. and Vives, X. (2019). Overlapping Ownership, R&D Spillovers, and Antitrust Policy. *Journal of Political Economy*, 127(5):2394–2437.
OECD (2019). International Comparisons. In *OECD Institutional Investors Statistics 2019*, pages 9–12. OECD Publishing, Paris.
Xie, J. and Gerakos, J. (2020). The Anticompetitive Effects of Common Ownership: The Case of Paragraph IV Generic Entry. *AEA Papers and Proceedings*, 110:569–572.