

Geographic Overlap, Agglomeration Externalities and Post-Merger restructuring

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Main findings

- Following horizontal M&As
 - Target establishments are more likely to be kept when they are in the **same location** as acquirer establishments *and* in industries with high **agglomeration benefits**, that is
 - greater potential for input sharing
 - greater benefits from knowledge spillovers
 - greater benefits from labor market pooling
- Vertical mergers
 - Same effects of geographical proximity and **co-agglomeration benefits** (= agglomeration benefits in related industries)
- Productivity of kept establishments
 - Goes up post-merger in target establishments in the same location as acquirer establishments and in industries with high (co-)agglomeration benefits

Agglomeration benefits

- Do they motivate the choice of targets?
 - They should if agglomeration benefits generate value in M&A transactions
 - Are firms more likely to merge when they have greater geographical overlap in industries with large agglomeration benefits?
- Not all agglomeration benefits require firms to merge
 - E.g., labor market pooling
 - Establishments in the same area benefit from a large and dynamic labor market the same way when they are independent as when they are part of the same company
 - ⇒ What is the role of M&As?
 - ⇒ Why are the benefits larger post- than pre-merger (obvious for some benefits, like input sharing, less obvious for others)?

Alternative interpretations

- Why can firms benefit from acquiring (and keeping) geographically close establishments?
 - familiarity with local markets (e.g., labor market, customers),
 - easier monitoring,
 - tax or other advantages obtained from local authorities
- These benefits may lead to value creation post-M&A
 - They can vary across industries and be correlated with the agglomeration benefits you identify
 - E.g., monitoring can matter more in high-tech industries
- To rule out (at least some of) these alternative explanations
 - You could use the 311 conglomerate (i.e., non-horizontal and non-vertical) M&As in your sample
 - Alternative stories, e.g., monitoring, have the same predictions for conglomerate deals as for other types of deals
 - The agglomeration story does not

Specification

- For a given acquirer / deal, the decisions to, e.g., keep an establishment and close another one are not necessarily independent
 - you need to consider these decisions together and the characteristics of establishments relative to other establishments of the same target firm
 - Deal fixed effects do exactly this
 - + they also allow to control for unobserved deal characteristics
 - + multinomial logit results are difficult to interpret
 - + they cannot accommodate FEs
- ⇒ My preferred specification
- OLS with the keep / drop decision on the left-hand side

Specification – Productivity tests

- Compare post-merger productivity changes of kept establishments with geographical overlap and high agglomeration benefits with productivity changes of other kept establishments
- Are these the right counterfactual establishments?
 - Firms keep establishments that they think will do well, perhaps for reasons other than agglomeration benefits
 - ⇒ Better counterfactual: establishments that were dropped post-merger
 - You want to measure how M&As allow to benefit from agglomeration
 - ⇒ Better counterfactual: similar establishments in similar areas but that belong to firms that did not merge

More on productivity tests

- What happens to the productivity of establishments that belonged to the acquirer pre-merger?
 - Your story predicts similar effects as for target establishments
 - Some alternative stories (e.g., easier monitoring) predict no effect

Other comments

- Sold establishments
 - Are they typically sold to firms that can benefit from similar agglomeration benefits from these establishments as those you document for target establishments?
- Do acquirers' announcement CARs reflect agglomeration benefits from mergers?
- Can you use a continuous variable reflecting, e.g., the change in total # of employees post-merger rather than sell/keep/close?
- Agglomeration benefits can be correlated with (/depend on) some acquirer / target /deal characteristics
 - Can you control for characteristics?
 - or use them as interaction terms to do cross-sectional contrasts?
- Other potential measures of labor market agglomeration benefits:
 - size of the labor market, presence of research universities, % of STEM graduates in the labor force, average age of the population