

Knowledge Spillovers, Tournaments and Individual Careers

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Contribution

- Nice contribution to the literature on the impact of knowledge spillovers
- Brings attention to the possibility of “competition effects”
- Takes advantage of a very comprehensive LEED dataset and a unique setting of the German labor market that allows testing of the “competition effects” hypothesis
- Provides a systematic discussion of the identification challenges
- Evidence on benefits of apprenticeship training programmes

Organization

- Motivation with a simple theoretical model
- AKM model to obtain quality measure of peers
- Explore the impact of peers on future earnings/wages of “untrained workers” who join the labor market

The Model

- Very simple model with three types of workers: “unskilled entrants”, “unskilled incumbents” and “skilled incumbents”
- Nice intuition to justify the positive impact of “skilled incumbents” and the (possibly) negative impact of unskilled entrants
- The assumption that individual output is additive on worker skill and on individual effort seems unrealistic

Measuring quality

- Employs AKM model
- Info on 33m workers and 2.6m firms
- Estimates worker and firm FEs
- Worker FEs are used to construct quality measure: average worker FE for coworkers in the same firm and occupation as the focal worker during the first year in the labor market
- No observable characteristics of the worker – worker FE picks average effect
- While estimating worker FEs spillovers are ignored
- Connected set?

The impact of peers

- Firms vs establishments
- Two-step ses
- Effects on labor market outcomes
 - “expected effects” for wage regressions
 - but wage regressions have about half the observations
 - stronger evidence for complex occupations (roughly twice)
 - but why a “stronger” competition effect?
- Distinguishing peers by experience level
 - why not adjust the quality measures?
 - Why the strong negative effect for peers with >9 yrs exp in complex occup?

The impact of peers

- Effect of skilled peers over time
 - Evidence of dynamic effects?
 - Hong & Lattanzio, 2022 – effect on future wages decreases over time
- Mediation analysis
 - Total vs direct effect – Gelbach decomposition?
- Robustness – Estimation quality of FE
 - FE estimated with less than 4obs vs more than 4 obs
- Other questions:
 - Does the size of the peer group matter?
 - Is the composition (trained vs untrained) relevant?
 - Can we look at time to promotion?

