Proposal Outline:
The effect of employee mobility on productivity

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1 Background

Several empirical studies have demonstrated the variation in the mobility of employees across regions. Almeida and Kogut (1999) suggested that interfirm mobility of engineers influences the local transfer of knowledge. Ge et al. (2016) interpret the higher levels of mobility in silicon valley as the outcome of targeted retention of human capital. Then question then is, does the variation in mobility also explain the variation in productivity across regions?

2 Research Question

In this paper, I intend to study the relationship between the movement of some employees into or out of a region and the productivity of other employees working in the affected regions.

3 Theory

The received wisdom earlier was that firms would have a greater incentive to keep highly dependent technology developed in weaker IPR countries secret (Cohen et al., 2000). However Zhao (2006) has more recently used patent data to argue that multinational enterprises may benefit from conducting R&D in countries with weak IPR protection by making up for the weaker IPR protection through better internal organization. The anecdotal increase in the mobility of employees at the weak IPR subsidiaries raises a potential paradox. If increased mobility of employees influences transfer of knowledge (Almeida and Kogut, 1999), should we expect improved productivity for inventors in those teams into which other inventors have moved in? The answer to this question is not completely explained by theory, and is therefore proposed here as an empirical study.

4 Data and Method

I propose to use data from the USPTO made available on patentsview.org to answer this question. Specifically, I intend to capture at the level of the region-year, the number of incoming and outgoing inventors. I additionally compute the productivity at the level of the region-year by a composite construct involving the number of new patents invented and the number of forward citations received. Controlling for the prior pool of patents, and monetary incentives I intend to understand the effect of inventor movement into and out of regions on the productivity of those regions.

5 Challenges

A primary challenge in a such as this is in understanding the direction of causality. While I do not have an answer for this question, I hope to use the empirical context to explore the possible mechanisms that can help explain the phenomenon.

References

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