Heterogeneity in Knowledge Flows of Regions: Impact on Invention Quality

Ashwin Iyenggar

Strategy Area Indian Institute of Management Bangalore

22 June, 2017

Outline

Motivation

Literature Review

Theory

Data and Method

Future Work

Research Question

Hypotheses

Create four slides and on each put up in pictures the various mechanisms and effects that literature suggests

Geographic Mapping San Jose



Figure: Geographic Definition of San Jose, CA



Methodology

- Data Source: Patents from USPTO, source: patentsview.org
- Data Source: Regions using Remote Sensing Data, source: naturalearthdata.com
- Unit of Analysis: Region-Year
- Dependent Variables: Total Citations Received, Non-Self Citations Received
- Independent Variables: Share of citations made within/outside region, within/outside assignee
- Control Variables: Technology subcategories (Hall, Jaffe, & Trajtenberg, 2001), Region fixed effects, Year effects
- Estimation Method: Negative Binomial

Addressing Potential Issues

Dir

Results

Limitations and Future Work

• (

Hall, B. H., Jaffe, A. B., & Trajtenberg, M. 2001. The NBER patent citation data file: Lessons, insights and methodological tools. Working Paper 8498, National Bureau of Economic Research.