Alliance Networks and Technological Dynamism: a comparison of 37 industries  
Jesse Shore and N. Venkatraman, Boston University School of Management  -  jccs@bu.edu

What is the role of bridging ties in alliance networks?

**Bridging ties are risky**
- Bringing together knowledge worlds is difficult
- Translation is difficult
- Potential upside is innovation

**Transitive ties are associated with easier information transfer**
- But may not offer new sources of knowledge

**Importance of innovation varies by industry**

**Proposition:**
*In technologically dynamic industrial sectors, we expect a greater tendency to create bridging ties, relative to the tendency to create transitive ties.*

Data and Methods

SDC platinum database of Joint Ventures, 2000-2007

- Constructed network data for each 4-digit SIC code separately
- Used SIC code of JVs, not parent companies

After processing and clean-up, 37 industry networks over 8 years

- Modeled evolution of network in each industry separately
- How did networks change year to year?

Siena model of network evolution (Snijders et. al, 2010)
- Markov Chain Monte Carlo, simulate and test framework

RESULTS

Technological dynamism is associated with more bridging ties*.

*where hazards of cooperation are not excessive.

Pharmaceutical firms avoid bridging ties.

Why? Greater risks in alliances, so bridging ties even more costly?