LEHD/LED in Action: A Researcher’s perspective

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<table>
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<tr>
<th>Our first set of LEHD papers</th>
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**Needs uniquely fulfilled by LEHD:**

<table>
<thead>
<tr>
<th>Paper</th>
<th>Needs</th>
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| “Who Leaves, Where to, and Why Worry?: Employee Mobility, Employee Entrepreneurship and the Effects on Source Firm Performance.” Campbell, Agarwal, Franco, Ganco (SMJ 2012) | • new venture creation  
• individual quality  
• parent firm performance  
• new venture performance |
| “Heterogeneity in Turnover: The Effect of Relative Compensation Dispersion of Firms on the Mobility and Entrepreneurship of Extreme Performers.” Carnahan, Agarwal and Campbell. (SMJ 2012) | • new venture creation  
• individual quality  
• full compensation distribution in organization |
| “What Do I Take With Me?: The Mediating Effect of Spin-out Team Size and Tenure on the Founder-Firm Performance Relationship” Agarwal, Campbell, Franco, Ganco. (AMJ 2016) | • new venture creation  
• individual quality  
• parent firm performance  
• new venture performance  
• co-mobility events |

**Contribution to Literature:**

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<tr>
<th>Paper</th>
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| “Who Leaves, Where to, and Why Worry?: Employee Mobility, Employee Entrepreneurship and the Effects on Source Firm Performance.” Campbell, Agarwal, Franco, Ganco (SMJ 2012) | • Higher quality employees are less likely to leave firms because they are able to appropriate higher compensation.  
• If they do leave, they are more likely to create new ventures than join established firms, which harms parent firms more than standard mobility. |
| “Heterogeneity in Turnover: The Effect of Relative Compensation Dispersion of Firms on the Mobility and Entrepreneurship of Extreme Performers.” Carnahan, Agarwal and Campbell. (SMJ 2012) | • Low performing employees are highly likely to leave organizations with high pay dispersion and move to existing firms with low pay dispersion.  
• Star employees are less likely to leave organizations with high pay dispersion, but if they do, they are much more likely to move to entrepreneurship. |
| “What Do I Take With Me?: The Mediating Effect of Spin-out Team Size and Tenure on the Founder-Firm Performance Relationship” Agarwal, Campbell, Franco, Ganco. (AMJ 2016) | • It is not the loss of a high performing individual with rare and specialized knowledge that has a negative and significant impact on the parent firm, it is the mediating impact of this loss on the founder’s ability to build, incentivize and mobilize a team to a new firm. |
Current projects: Antecedents and Consequences of Entrepreneurship across Multiple Levels

- Assessing Patent-based Employee Mobility and Entrepreneurship Measures
- Technological Distance, Geographical Distance and the Returns from Mobility
- Using Employee Mobility and Entrepreneurship to Measure Industry Relatedness
- Diffusion of Compensation Patterns Across Regions and Effect on Individual Mobility and Entrepreneurship
- The Role of Entrepreneurs’ Prior Experience in Start Up Performance
- Flying High or Crashing Down: Pre-Entry Knowledge and the Distribution of Startup Performance
- Who do Entrepreneurs Hire?
- The Effect of Patents on Inventor Mobility and Entrepreneurship
Where would we be without the LEHD?

1. Researchers, Policy Makers, and other users of data would have an incorrect view of the world.

   • “The Effect of Patents on Employee-Inventor Mobility and Entrepreneurship” (Frake, Agarwal and Ganco, 2017; Frake, 2017).

   • Mostly uses patents to measure mobility
   • Patenting constrains inventors from moving to another firm
   • No evidence on how patenting affects entrepreneurship

Existing Wisdom

Problems with Existing Data

   • Misclassification bias: measurement error on 0/1 DV, correlated with patenting (Ind. Var.)
   • Selection bias: need multiple patents to observe mobility (sampling on stars)
   • Difficult to observe entrepreneurship

New Wisdom

   • Patenting does NOT constrain mobility
     • Was an artifact from misclassification bias
   • Patenting significantly increases mobility and entrepreneurship
     • Signal inventor quality
Where would we be without the LEHD?

2. We would know a lot about Sweden and Denmark...
   - These countries would gain primacy on a vast swath of important research questions.
   - This might limit our understanding of industries underrepresented in these countries.
Potential Process Enhancements

Process Enhancements

• Reduce the uncertainty associated with access and administration
  • Better clarity on proposal review cycles
  • Better clarity on involvement of other agencies in data creation and data access (IRS, SSA, ...)
  • Better clarity on disclosure review cycles
  • Better clarity on states’ policies, timelines, and industry/occupation characteristics

• Increase access:
  • More RDCs, more branches, remote access?
## Potential Process Enhancements

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<tr>
<th></th>
<th># of Approved Proposals</th>
<th>Mean Proposal Review Duration</th>
<th># Employees in NAICS i</th>
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Potential Content Enhancements

Content Enhancements

• Release of Public LEHD extracts of the smallest cells possible
  • Occupation x industry x age x zipcode x employer size x employer age x ... ???
  • Researchers with idiosyncratic samples can validate their data against nationally representative data.

• Integration of additional data...
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<tr>
<th>Potential Research Questions</th>
<th>Requires LEHD and ...</th>
<th>Potential Research Contribution</th>
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<tr>
<td>How do organizational structure and incentives influence new firm creation by employees?</td>
<td>MOPS</td>
<td>Understand how different management and organizational practices enhance or constrain entrepreneurship.</td>
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<td>What are the returns from patenting to individuals and firms?</td>
<td>Patents</td>
<td>Understand how firms manage human capital of inventors and how it differs from the management of other employees.</td>
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<td>When do self-employed workers hire employees?</td>
<td>ILDB</td>
<td>Understand how/when entrepreneurs transition from subsistence to growth.</td>
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<td>How does educational backgrounds relate to mobility?</td>
<td>SESTAT</td>
<td>Understanding of whether changing nature of knowledge and educational backgrounds contribute to declining mobility.</td>
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<td>How do prior work experiences affect individuals’ decision to start a high tech company and to spend on R&amp;D (above or below industry level)?</td>
<td>BRDIS</td>
<td>Understand who high-tech entrepreneurs are and how much startups invest in R&amp;D</td>
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<td>How does patent litigation affect employee entry and exit decisions?</td>
<td>Patent Litigation</td>
<td>Better understanding of how patent enforcement affect human capital.</td>
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<td>What are the (full) returns to entrepreneurship?</td>
<td>Tax records</td>
<td>Shed light on the full set of monetary gains that entrepreneurs/early employees obtain, beyond just UI-covered wages</td>
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<td>How do founders differ from employees?</td>
<td>Business ownership data (e.g. SBO)</td>
<td>Understand how the careers of founders differ from the careers of early venture employees.</td>
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