Job-to-Job Flows and the Consequences of Job Separations

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Views expressed in this presentation are the authors' own opinions and not those of the U.S. Census Bureau, the Federal Reserve Bank of Cleveland, or the Federal Reserve System. All results have been reviewed to ensure that no confidential data are disclosed.
Purpose

• Earnings losses following job displacement are well-documented
  – Identified by large contractions at firm (“distress”)
  – Identified by self-reported job loss
• Comparisons with separations other than displacements are uncommon
• We study both types of separations in parallel to provide a more comprehensive picture
  – Focus on permanent separations
Data

• U.S. Census Bureau’s LEHD program
• Quarterly panel of linked employer-employee observations
• Define reference quarter as quarter of separation (or not)
  – Presentation focuses on 2005
Data: Workers

- Employed in ref qtr in California, North Carolina, Oregon, Washington, Wisconsin
- Follow nationally
- Ages 25-55; ≥ 3 years tenure
- Stayers: same employer for at least 3 qtrs
- Separators: employed with a new employer within 8 qtrs.
Data: Firms

• Exclude firms with < 50 employees
• Exclude firms that close (does not matter)
• Distressed: decline in employment \( \geq 30\% \) in year ending in qtr after ref qtr
  – Common definition for administrative data
Earnings equation a la JLS (1993)

- But for a single reference quarter

\[ y_{it} = \alpha_i + X_i \beta + \sum_{k \geq -23} A_{it}^k \gamma^k + \sum_{k \geq -12} S_{it}^k \delta^k + u_{it} \]

- \( i \) is individual; \( t \) is calendar quarter
- \( y_{it} \) is quarterly earnings
- \( A_{it}^k = I(\text{ref qtr is } k \text{ qtrs ago as of qtr } t) \)
- \( S_{it}^k = I(\text{individual } i \text{ separated } k \text{ qtrs ago as of qtr } t) \)
- \( X_{it} \) = interactions between sex, age, and age^2
• Estimated separately for distressed and non-distressed separators
  – Control group for either sample is all stayers
  – Similar if stayers divided into distressed and nondistressed
Earnings Losses, 2005

Distressed

Non-Distressed

earnings vs. quarter relative to separation

earnings vs. quarter relative to separation
First take-away

- Firm distress (displacement) *is not* a major distinction among permanent separators
JLS found otherwise. Why?

• Appears to be time period
  – Couch & Placzek: Connecticut 1999-2004
Second take-away

- Duration of nonemployment *is* a major distinction
- Expand the JLS equation to interact type of separation with duration of nonemployment
Distressed
Earnings Losses, 2005

quarters of nonemployment:
- green dots: within
- blue squares: adjacent
- red triangles: one
- brown diamonds: two
- orange crosses: three
- cyan plus signs: ≥four

earnings vs. quarter relative to separation
• Duration of nonemployment, not firm distress, is the major distinction

• Are distressed separators more likely to experience more nonemployment? No.
• Duration model for re-employment at new job
• For this purpose, we further divide nondistressed firms by growth rate
  – Distressed
  – Slowly shrinking
  – Slowly growing
  – Rapidly growing
Cumulative Probability of New Job by Duration, 2005

Pr(find new job)

quarter after separation

distressed
slowly shrinking
slowly growing
rapidly growing
• This does not imply that distressed workers experience similar nonemployment overall
• They are much less likely to be recalled to former job
Cumulative Probability of Recall by Duration, 2005

- distressed
- slowly shrinking
- slowly growing
- rapidly growing

**Pr(recalled)**

**quarter after separation**

2 4 6 8
• Why do nondistressed (permanent) separators fare the same as distressed separators?
• Not heterogeneity in labor force attachment
  – Holds for variations in tenure, sex, age, earnings ...
  – Holds in widely different macroeconomic periods
  – Holds with individual time trends
  – Holds for new mothers
Mechanisms we are investigating

• Job ladder
  – Movement to lower-paying firms

• Declines in “local” labor demand
  – Geography, industry, occupation
Take-Aways

• Outcomes for permanent separators are similar across firm distress/nondistress
  – Nonemployment predicts earnings losses
  – Nonemployment is similar
Research Implications

• Displacement still of interest because they are likely exogenous and often unanticipated
• Research should concentrate on the association between earnings losses and nonemployment
Extra Slides
Identifying job changes and nonemployment spells in LEHD data

- UI wage record data

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Changes jobs in Q3

Job change with 1 full-quarter nonemployment spell.

Full-quarter earnings
Nonemployment duration

• A competing-risks hazard model of re-employment at a new job or recall

\[
\text{Logit(new job in } t \mid \text{ not reemployed before } t, \text{ not recalled in } t) = \alpha_t + \beta_t X_i + \gamma_t Z_i + \lambda_t g_{j(i)} + \mu_{it}
\]

\[
\text{Logit(recall in } t \mid \text{ no reemployed before } t) = \alpha'_t + \beta'_t X_i + \gamma'_t Z_i + \lambda'_t g_{j(i)} + \mu'_{it}
\]

• \(X_i\) is a vector of worker characteristics
• \(Z_i\) is a vector of characteristics of the separating firm
• \(g_{j(i)}\) = growth rate category of separating firm
Observed vs. Actual Nonemployment

• We observe only full quarters of nonemployment.
• If separations and accessions are uniformly distributed within each quarter, then
  – A within-quarter move implies an average of 5-6 weeks.
  – An adjacent-quarter move implies an average of 3 months.
  – And so on.