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

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Relationship between Research to J2J Data Product

This project relates to initial work that lead to the construction of the U.S. Census Bureau's Job-to-Job Flows (J2J) data product.

These publicly available data include statistics on: (1) the job-to-job transition rate, (2) hires and separations to and from nonemployment, and (3) characteristics of origin and destination jobs for job-to-job transitions. These statistics are available nationally and at the state level, by industry and worker characteristics.

The decision to include moves to and from nonemployment in J2J was based on results from this research project.

Motivation

U.S. labor market exhibits high rate of reallocation of workers across firms

- Davis, Haltwianger and Schuh (1998)

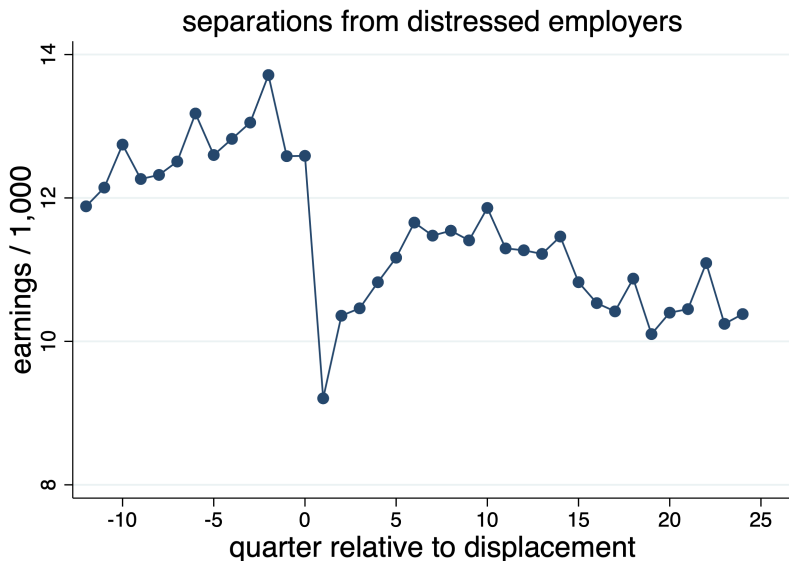This dynamism is a key ingredient in aggregate productivity

- Schumpeter (1942)

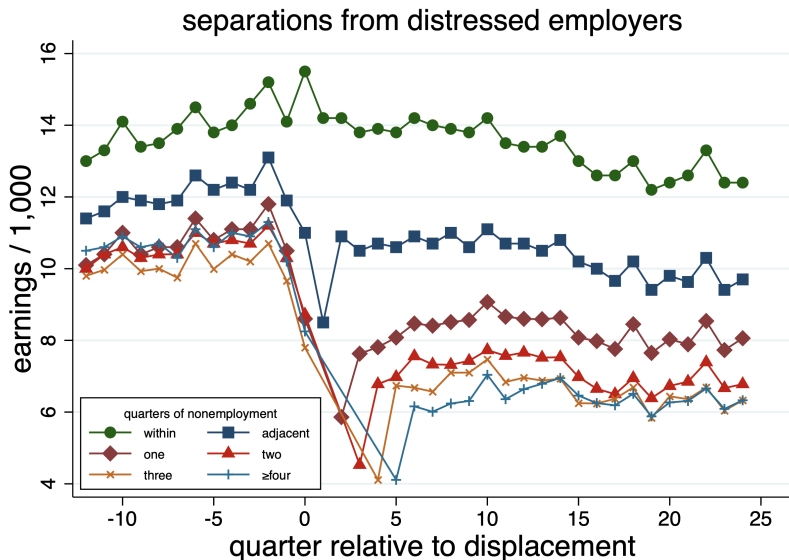Concern that some workers might be harmed in the process

- Jacobson, Lalonde and Sullivan (1993)

Understanding the magnitude and source of these economic losses is critical in devising effective policies to mitigate these adverse consequences of a dynamic economy
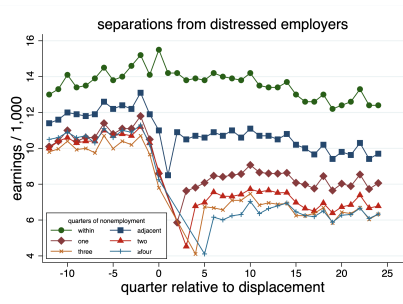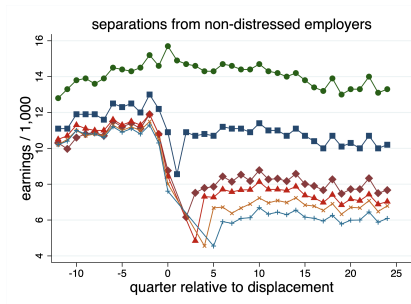
Prior Research Focuses on Displaced Workers

separations from distressed employers

Earnings Losses are Related Duration of Nonemployment

separations from distressed employers

earnings / 1,000 vs. quarter relative to displacement

quarters of nonemployment
- within
- adjacent
- one
- two
- three
- ≥four

Earnings Losses are not Related to Employer Distress

Data

Data are from the U.S. Census Bureau's LEHD program

- construct a panel of linked employer-employee observations, pooling the earnings histories from five large LEHD states: California, North Carolina, Oregon, Washington, and Wisconsin
- most analysis focuses on workers employed in the reference quarter 2005:2

Our sample includes three types of workers:

- **stayers**: workers who are continually employed with the same employer for at least the three quarters after the reference quarter
- **separators**: workers who separate from their employer in the reference quarter and become re-employed with a new employer
- **recalls**: workers who separate from their employer in the reference quarter but return to this same employer

An employer is **distressed** if they experience 30-percent or larger employment loss in the year ending in the quarter subsequent to the separation

Description of Sample

|	Non-Distressed		Distressed	
	stayers (1)	separators (2)	stayers (3)	separators (4)
Age at time of separation				
25≤age≤34	24.9	37.9	22.6	28.7
35≤age≤44	34.8	34.7	34.8	36.4
45≤age≤55	40.3	27.4	42.5	34.9
Sex				
Male	50.5	52.1	53.5	59.6
Firm Size				
50≤firm size<100	10.6	12.6	22.5	23.8
100≤firm size<500	27.6	31.6	45.0	49.7
500≤firm size	61.8	55.8	32.6	26.5
N	680,000	178,000	13,000	14,000

Empirical Equation 1

We start by following JLS (1993) and estimate a distributed lag model:

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

- i is an individual and t is a quarter
- y_{it} is quarterly earnings
- A_{it}^k is an indicator for the reference quarter being k quarters ago as of quarter t
- S_{it}^k is an indicator equal to one if individual i separated k quarters ago as of quarter t
- X_{it} consists of the interactions between sex, age and age squared

We estimate this specification separately on a sample with distressed and non-distressed separators. Both samples includes all stayers.

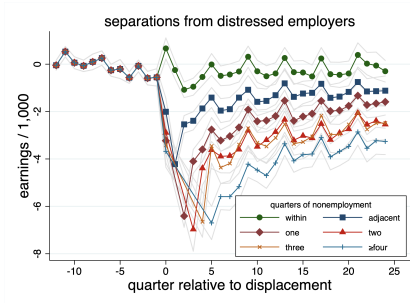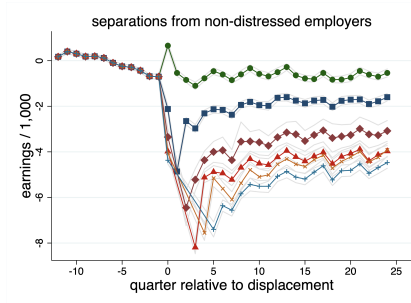# Effect of Separations by Employer Health
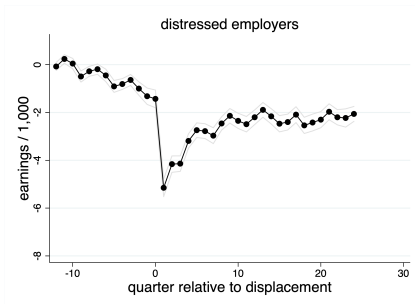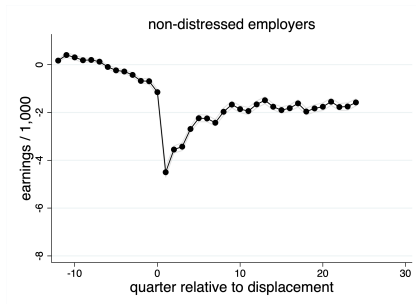
Effect of Separations by Employer Health
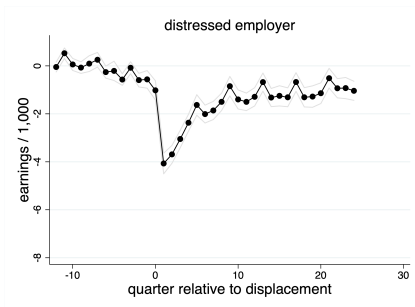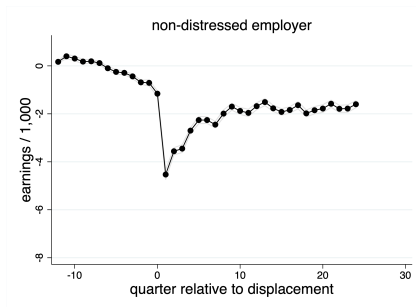
Empirical equation link

Effect of Separations by Duration of Nonemployment

Empirical equation (link)

The Role of Unobserved Worker Heterogeneity

We do not think that differences in labor force attachment across workers are driving the results for the following reasons:

- relationship between earnings losses and duration of nonemployment is similar for separators from distressed and nondistressed employers
- our main results are robust across various macroeconomic conditions
- our main results are robust across demographic groups that can be expected have more homogeneous levels of attachment to the labor force
  - workers reemployed within 4 quarters
  - workers with at least 5 years of tenure before separation
  - men ages 35-44
  - women ages 25-34
  - omitting jobs with particularly low quarterly earnings
  - omitting jobs in the temporary help and related industries (NAICS 5623).

Duration of Nonemployment
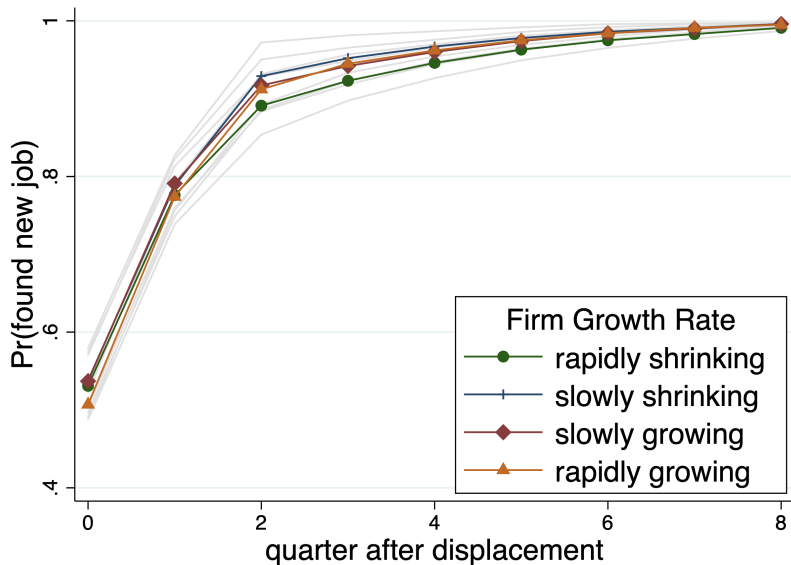
The Role of Recalls
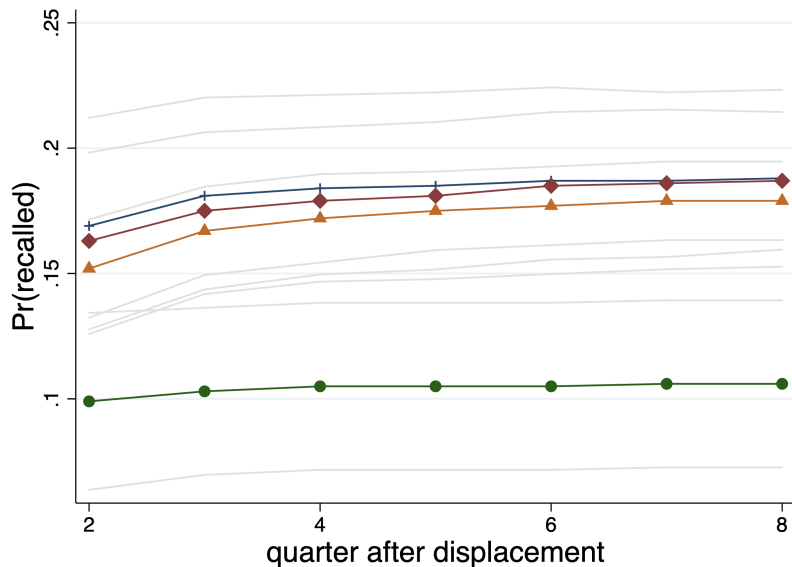
Conclusion

Summary of Findings

- on average, earnings losses follow separations
- firm distress is not predictive of earnings losses for separators
- duration of time spent in nonemployment prior to finding a new job is strongly associated with earnings losses

Interpretation

- future research on the consequences job separations should concentrate on understanding the strong association between nonemployment and earnings losses
- focus on displaced workers may not be entirely misplaced because these separations are more likely to be unanticipated and exogenous to choices made by the workers
- publicly available data from J2J could be used to identify groups of workers who are flowing into nonemployment

APPENDIX SLIDES

Empirical Equation 2

We extend the first specification to compare separators to stayers from the same type of employer (distressed vs. non-distress):

$$y_{it} = \alpha_i + X_{it}\beta + \sum_{d=0,1} \sum_{k \geq -23} A_{it}^{k,d}\gamma^{k,d} + \sum_{d=0,1} \sum_{k \geq -12} S_{it}^{k,d}\delta^{k,d} + u_{it}$$

- $A_{it}^{k,0}$ ($A_{it}^{k,1}$) is an indicator equal to one if the reference quarter is k quarters after t and the individual is employed at a non-distressed (distressed) employer in the reference quarter
- $S_{it}^{k,0}$ ($S_{it}^{k,1}$) is an indicator equal to one if $A_{it}^{k,0}$ ($A_{it}^{k,1}$) is equal to one and the individual i is a separator

We estimate the specification on a pooled sample that includes all separators and all stayers. back

Empirical Equation 3

We extend the second specification to allow for different effects of separations by duration of time spent in nonemployment prior to finding a new job:

$$
y_{it} = \alpha_i + X_{it}\beta + \sum_{d=0,1} \sum_{k \geq -23} A_{it}^{k,d}\gamma^{k,d} + \sum_{d=0,1} \sum_{0>k\geq-12} S_{it}^{k,d}\delta^{k,d}
$$
$$
+ \sum_{N=0}^{5} \sum_{d=0,1} \sum_{k \leq max\{N-1,0\}} S_{it}^{k,d,N}\delta^{k,d,N} + u_{it}
$$

- Where $S_{it}^{k,d,N}$ is an indicator equal to one if $A_{it}^{k,d}$ is equal to one and i is a separator that had a duration of nonemployment equal to N

We estimate the specification on a pooled sample that includes all separators and all stayers. back