

# Economic Shocks and Worker Inequality: Evidence from the Great Recession

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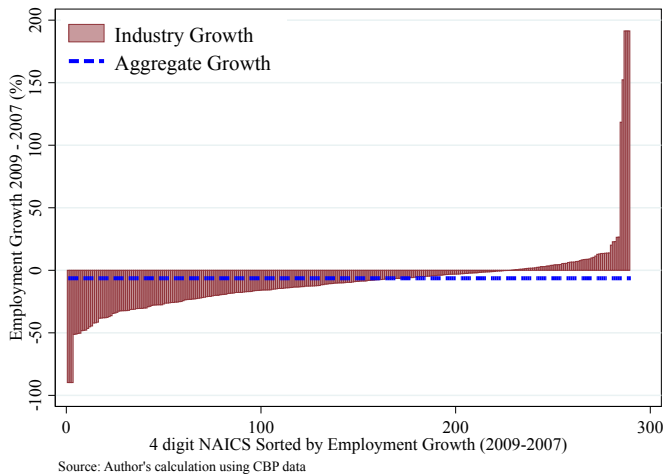
## Employment Inequality

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## Idea

- Recessions are periods in which many firms/establishments exit
- Some worker types are more concentrated in firms more likely to exit during recessions
- These workers will be more affected by economic downturns
- Use cross county/industry heterogeneity to split decline into *between* and *within* components

# Industry Heterogeneity: Employment



**Figure 1: Large heterogeneity of employment growth during the Great Recession**

# Industry Heterogeneity: Establishments

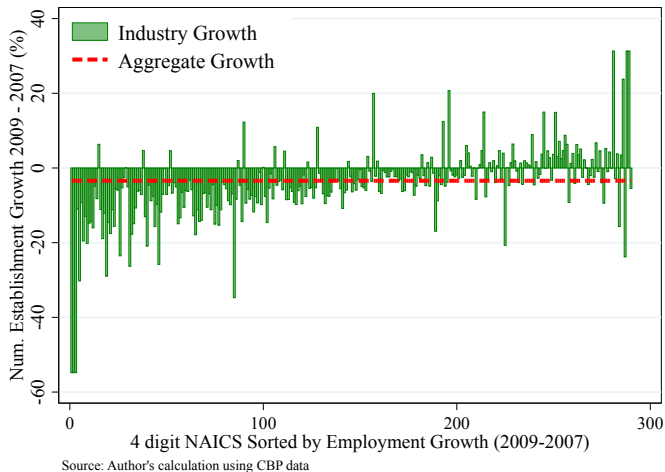
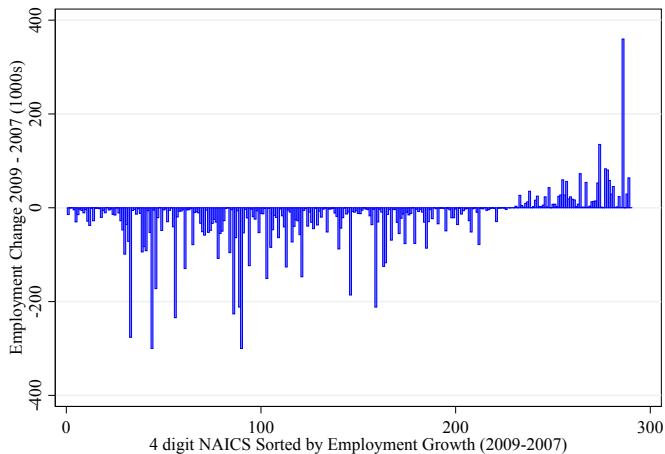


Figure 2: Strongly correlated to decline in number of establishments



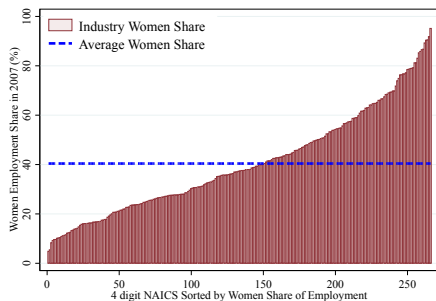
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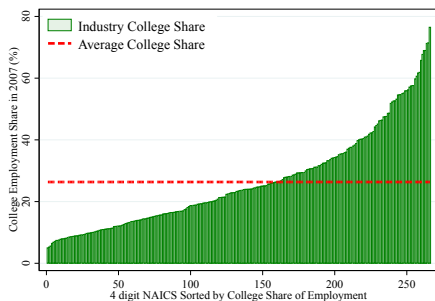
Source: Author's calculation using CBP data

**Figure 3: Heterogeneity not driven by small sectors**

# Industry Heterogeneity: Women and College Share



Source: Author's calculation using ACS data



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Figure 4: Industries Differ in the Employment Composition

### Why focus on exit?

- Great Recession: Large decline in the formation of new businesses
- Decline in firm entry was larger than increase in exit
- Heterogeneous impact: Young firms hire a disproportional share of young workers

# Entry and Exit of Firms in Great Recession

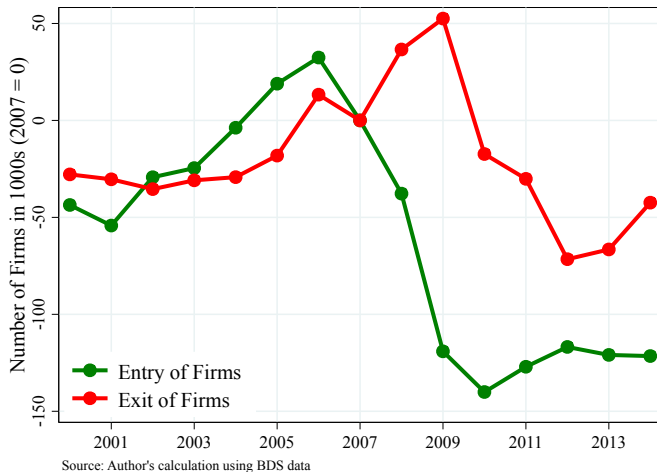


Figure 5: Decline in Entry Was Larger than Increase in Exit

# Entry and Exit Rates of Firms in Great Recession

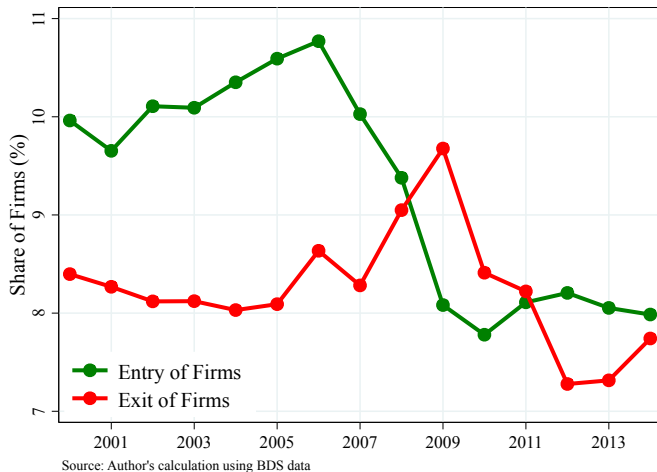
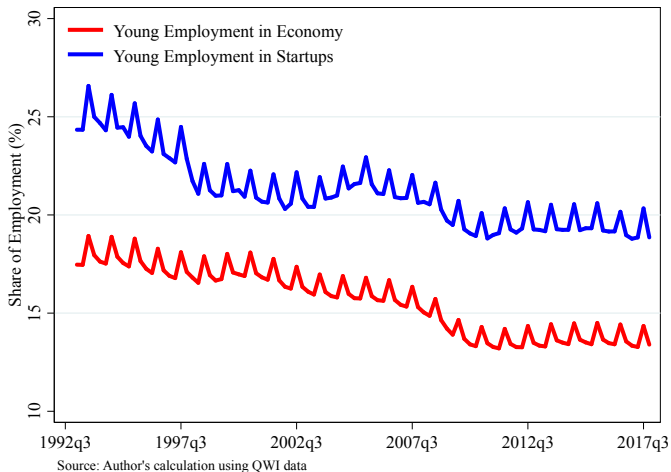


Figure 6: Similar when looking at Entry and Exit Rates

# New Firms Employment



**Figure 7:** Young Firms Hire a Disproportionate Share of Young Workers

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Why focusing on employment inequality?

- Can methodology be applied to other firm-level outcomes? Income inequality
- Useful to understand gender gap, college premium, and aggregate vs. cross-sectional elasticities

Re write equation (7) in paper

$$\Delta W_j^\tau = \alpha_i^\tau + \beta_i^\tau D_j + \epsilon_{ij}^\tau,$$

- $\Delta W_j^\tau$  is the mean real wage of group  $\tau$  in industry  $j$  and  $D_j$  is the death of establishment
- Then we can do  $\hat{\omega}|_D = \frac{\hat{W}_j^\tau}{W_j^\tau}$  as in equation (9)



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Apply to gender differences

- Use data from QWI for wages of women and men at the 2-digit NAICS
- Establishment deaths come from CBP
- $\hat{\omega}^{Men} - \hat{\omega}^{Women} = -2.4\%$ : wage of men drop an additional 2.4% because of establishment exit

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- Great to see other applications
  - Decline of startup rate (Should we care about the decline in firm formation?)
  - Income inequality (How much do firms contribute to income inequality)
  - Other recessions (Was the Great Recession special?)