Wage employment, unemployment and self-employment across countries

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Key questions

- Why do poorer countries have
  - Higher rates of self-employment
  - Higher ratio of unemployment relative to wage employment
- The facts can be explained by *labor market frictions*
  - Use an elegant, *minimal* extension of DMP model
  - Vacancy posting cost can buy us most of the variation in key moments
    - Job destruction rate important too

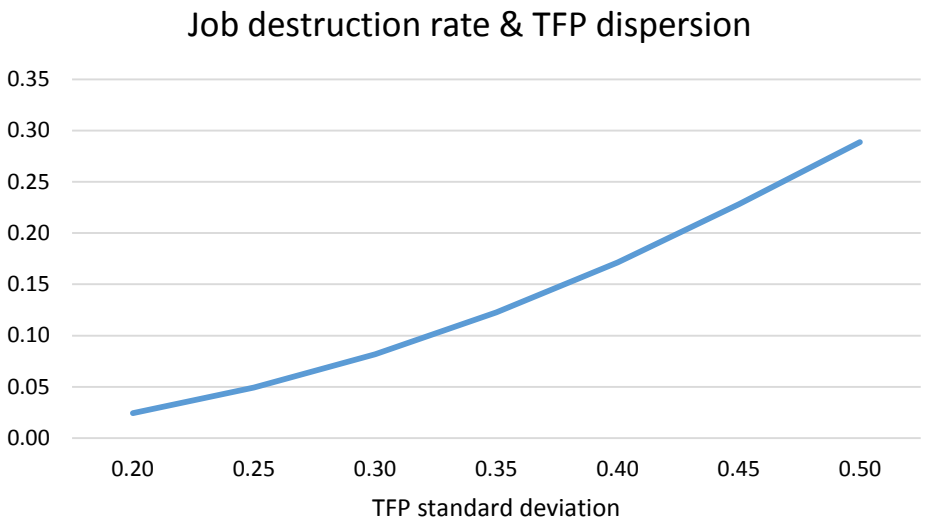
Today's agenda

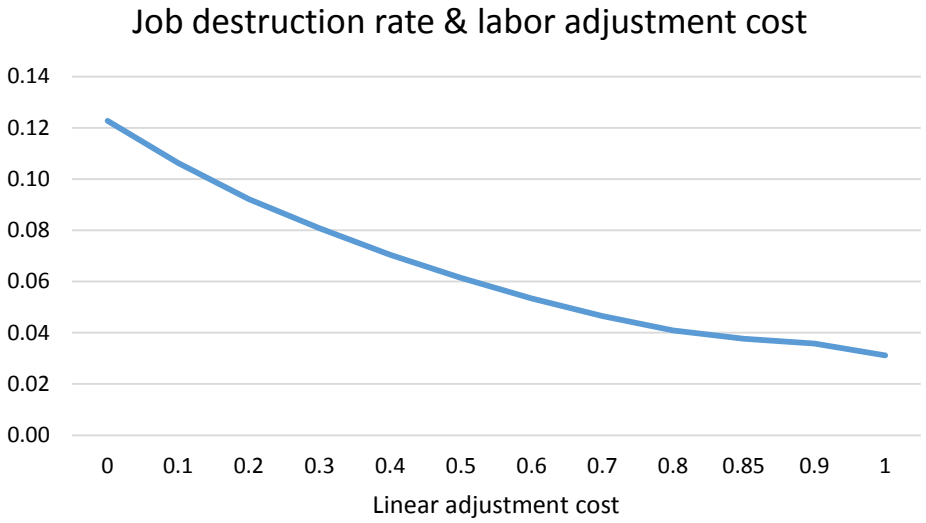
- Job destruction rate
- What is going on with the U.S. economy? Maybe you can help us out.

Job destruction rate

- JD rate is set exogenously, implied by other calibrated moments
  - Near-primary importance for overall model accounting
  - Primary importance for explaining unemployment to employment ratio and self-employment rate in isolation
- Yet job destruction is endogenous
  - Hopenhayn models: even in steady state, JD arises from idiosyncratic productivity/demand shocks
  - Lower job destruction can be caused by
    - Lower shock dispersion
    - Higher *adjustment frictions*
      - Indeed, introducing and varying frictions is key lever for setting JD (and JC) rate

Job destruction rate *(2)*





Standard off-the-shelf model:

- Firm-level TFP follows AR(1)
- Kinked linear adjustment costs (true for quadratic also)

Job destruction rate *(3)*

This analysis points to high hiring costs or low matching efficiency and a high job destruction rate as the root causes of not only high UN ratios, but also high self-employment in poor countries.

- Job destruction quite important for explaining key facts
- Yet endogenous+targeted JD might change vacancy cost and TFP dispersion accounting in calibration
  - In other words: we choose JD rate and TFP dispersion (to target firm size distribution) then infer adjustment costs
  - Targeting JD could give us different inferred costs (and dispersion)
- ➔ Large potential returns to endogenizing+targeting JD in the model
  - But large costs!

Puzzles in the U.S. economy

Job and worker flows

- Measures of labor market flows have declined
  - Though U to E may be cyclical, others aren't

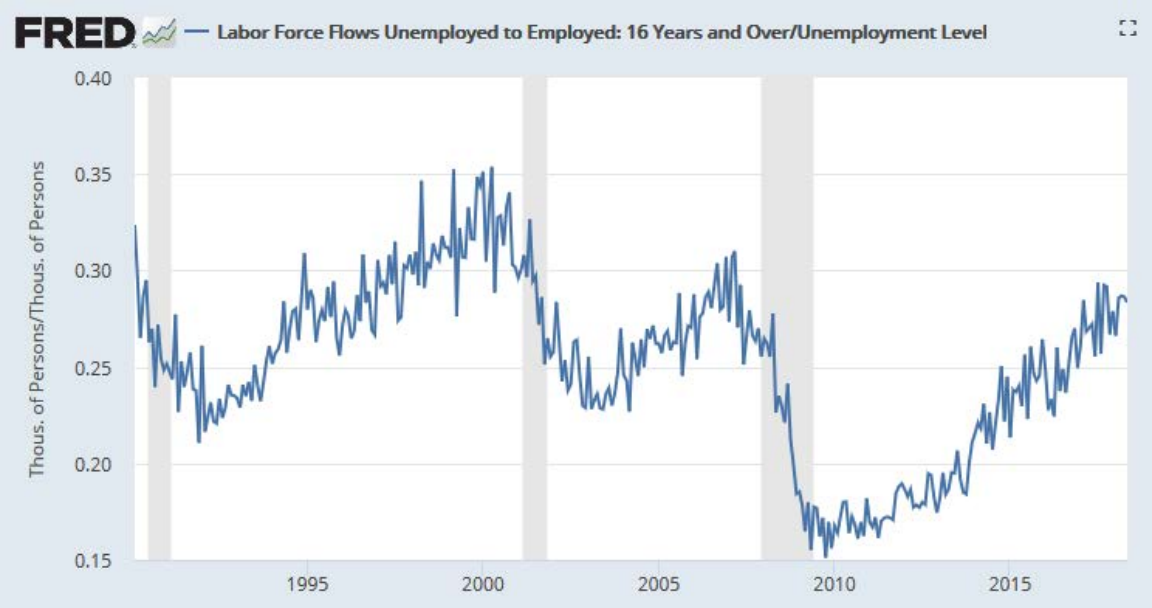
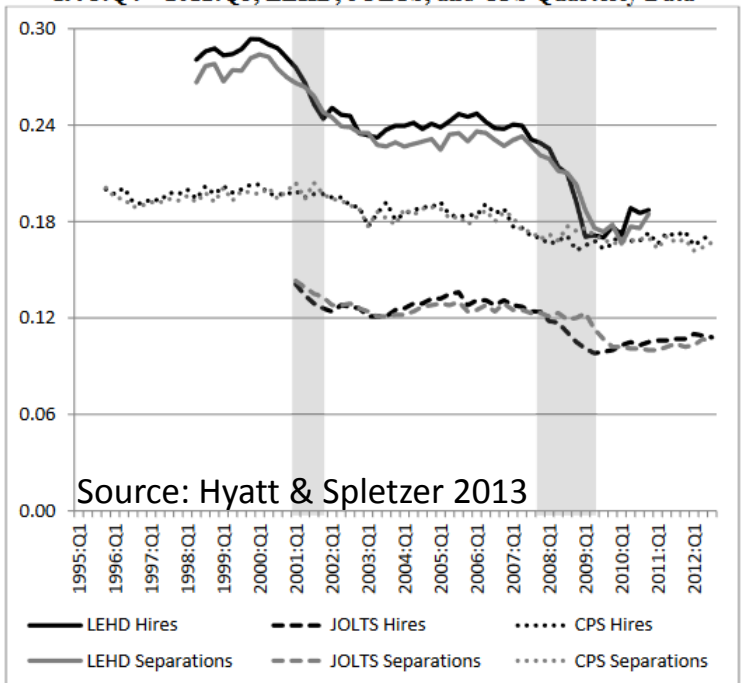
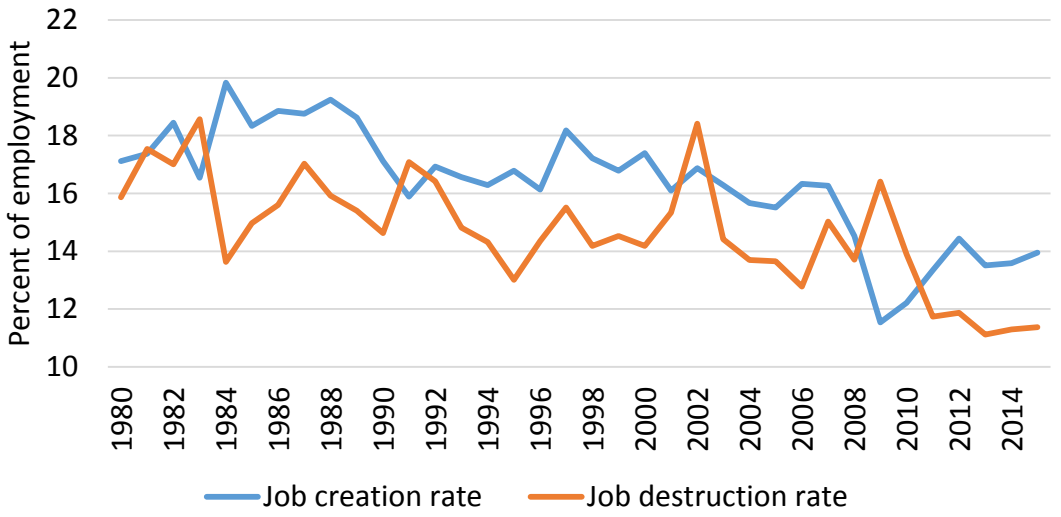


Figure 1: Hires and Separations
1995:Q4 – 2012:Q3, LEHD, JOLTS, and CPS Quarterly Data



Source: Hyatt & Spletzer 2013

Job flows

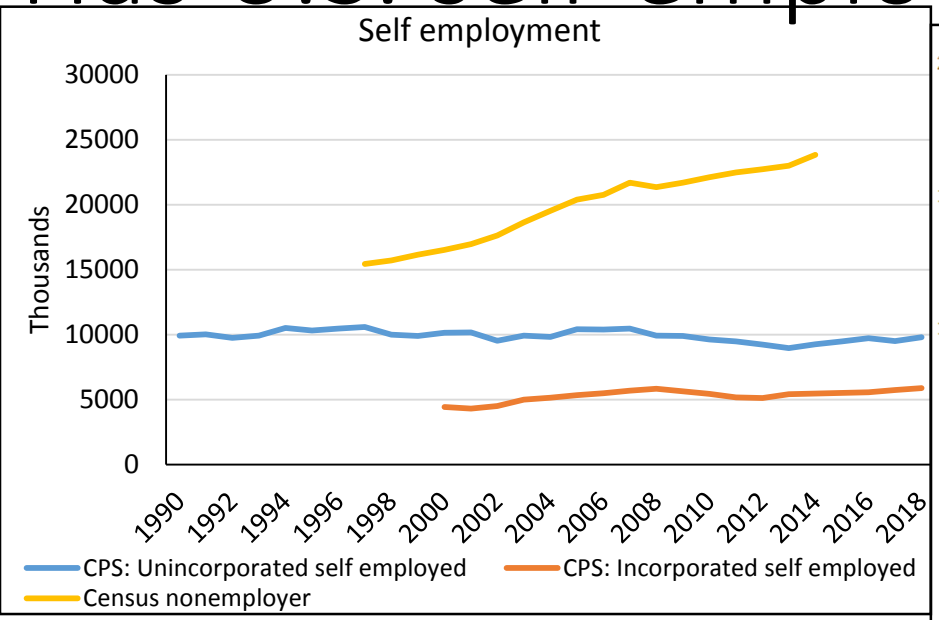


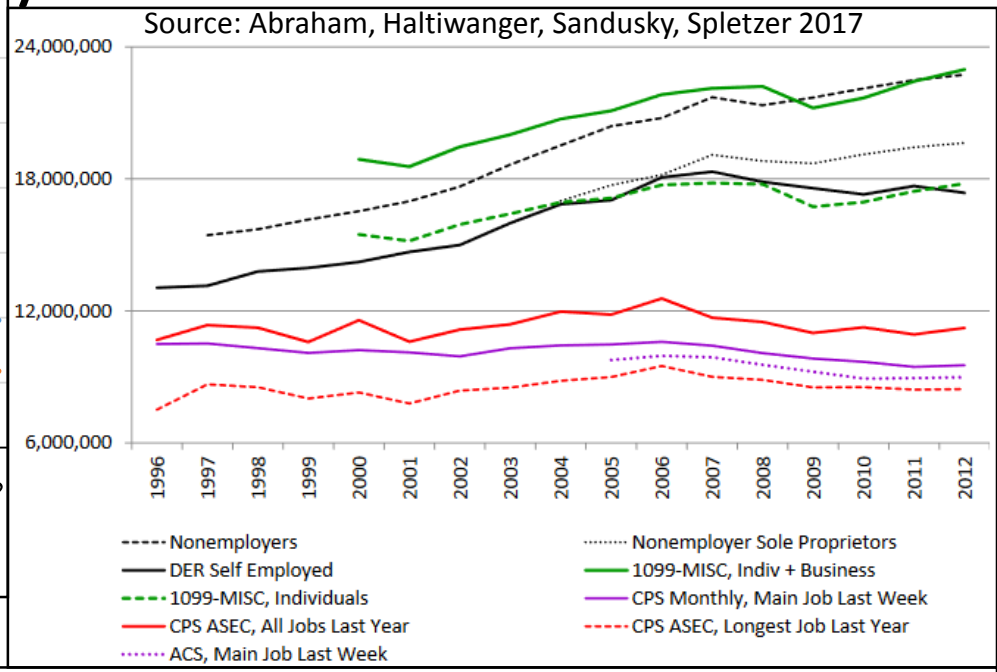
Source: Business Dynamics Statistics

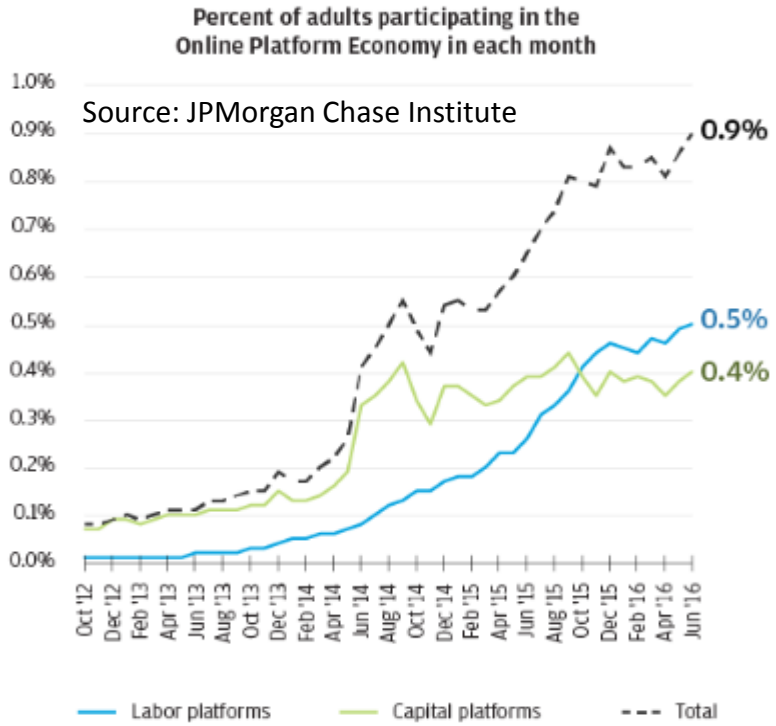
Interpreting U.S. trends through Poschke model

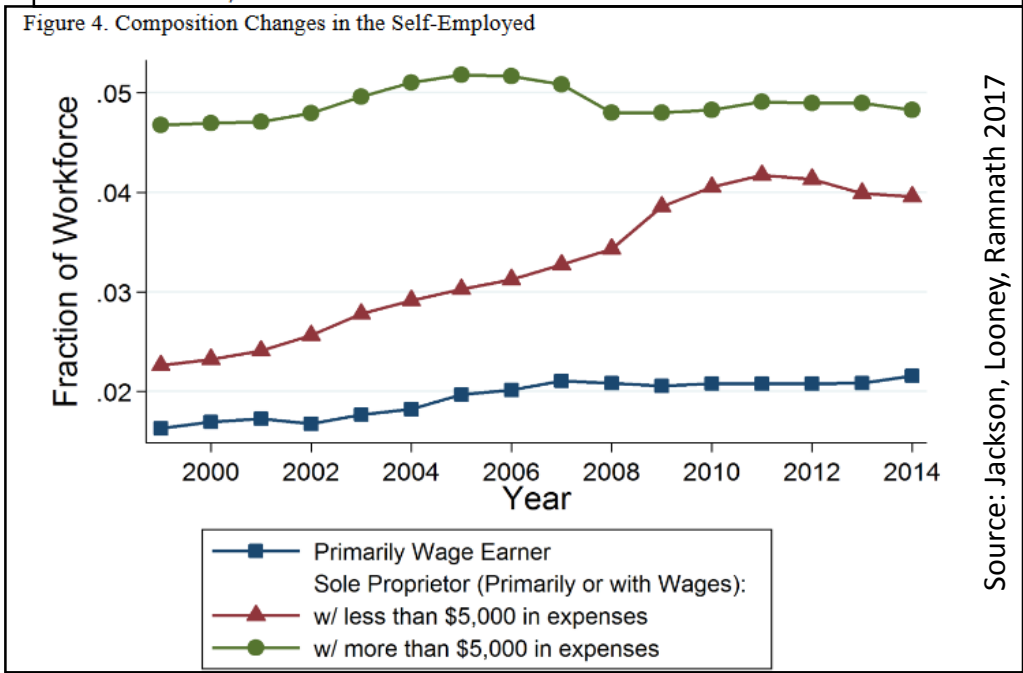
- Poschke model: Declining labor market flows consistent with increased labor market frictions
- Also Poschke model: Increased frictions → increased self employment
  - Has self employment increased in the U.S.? *Particularly "own-account"*

Has U.S. self-employment increased?



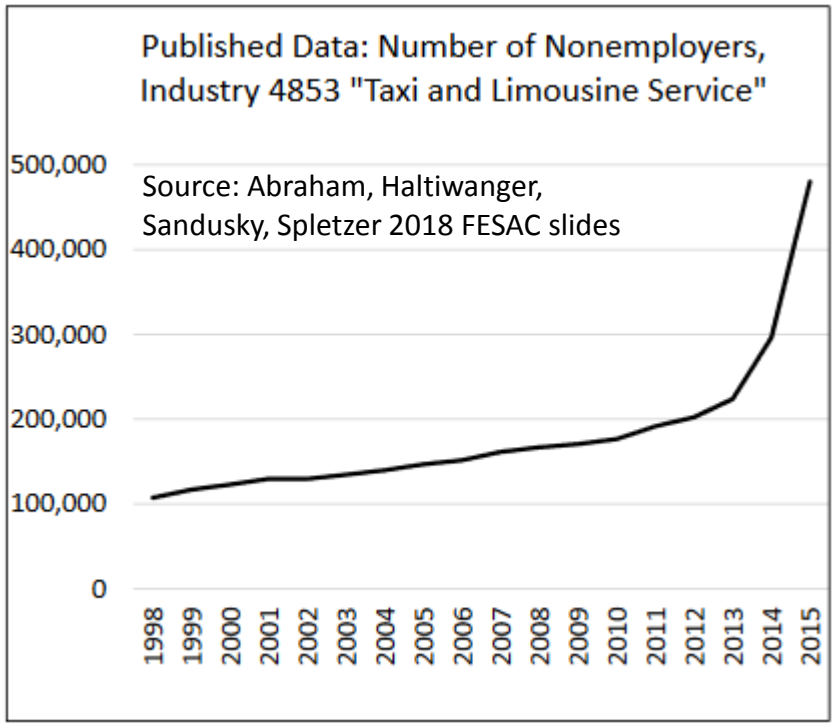




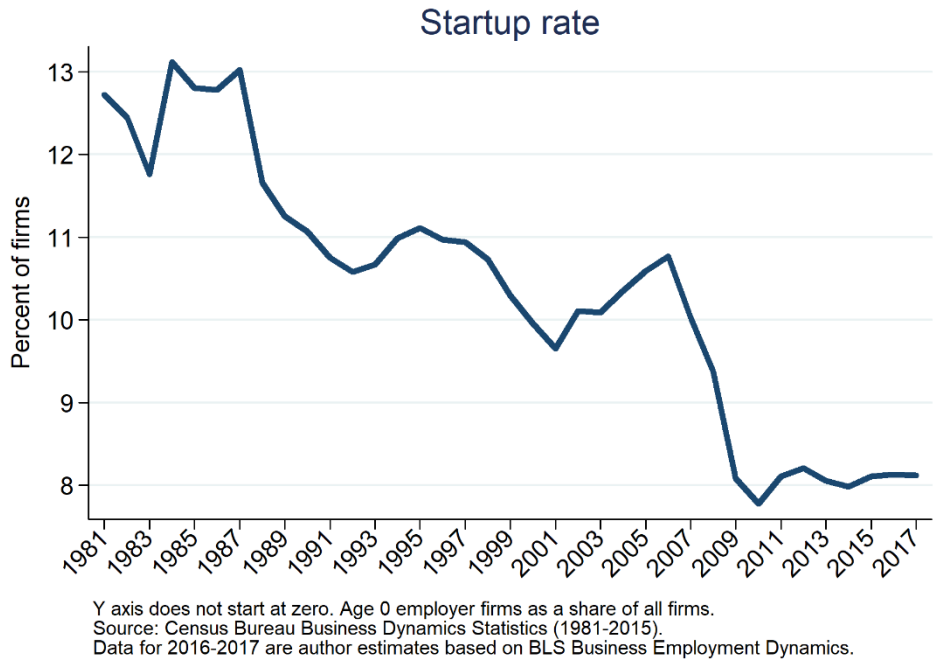


Has U.S. self-employment increased?

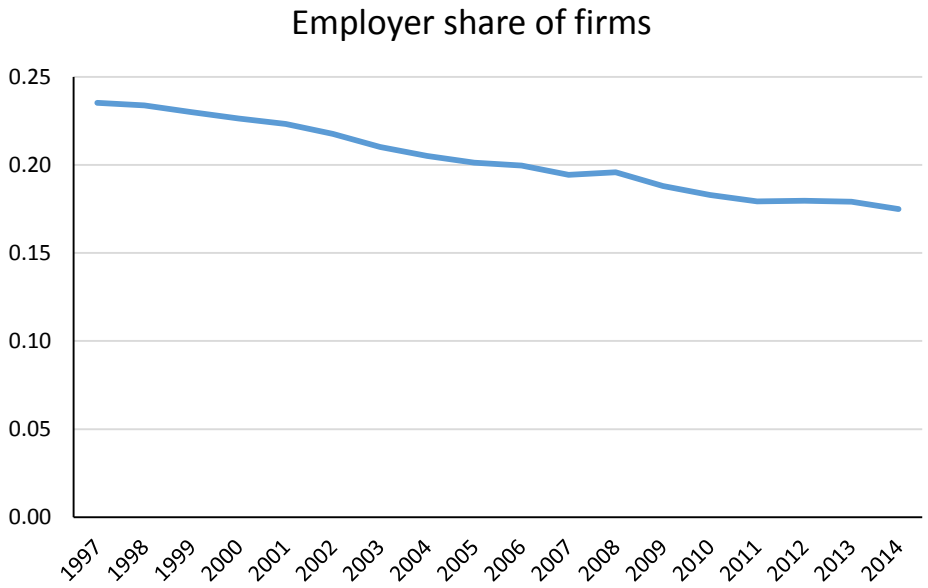
- Different sources give different answers
  - Abraham et al. (2017):
    - 65% of self emp tax filers do not report self emp on survey
    - 50% of self emp on surveys do not report self emp income on tax forms
- Anecdotally, lots of reasons to think of increase in contingent work, “gig” work, etc.
  - Consistent with Poschke labor market frictions rising



Has U.S. self-employment changed?



Y axis does not start at zero. Age 0 employer firms as a share of all firms.
Source: Census Bureau Business Dynamics Statistics (1981-2015).
Data for 2016-2017 are author estimates based on BLS Business Employment Dynamics.



Total employer firms as a share of all firms (employers plus nonemployers)
Source: Business Dynamics Statistics, Nonemployer Statistics

- Rising entrepreneurship driven by rising own-account work consistent with rising frictions
- But unemployment/employment ratio?

The point is…

- While Poschke model is designed for cross-country analysis, may have insights for within-country trends
- In particular, two puzzles
  - Declining labor market flows
  - Rising (maybe) self employment, declining new employer business formation
- Very interesting paper, and this general modeling agenda is widely valuable elsewhere too