Training or Search?
Evidence and an Equilibrium Model
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\(^1\) Disclaimer: opinions not necessarily those of the Deutsche Bundesbank
Motivation

- Labor market reforms in Germany affected several aspects of labor market policies
  - Active LMP: training for unemployed workers
  - Passive LMP: unemployment benefits
  - Match efficiency
  - ...
- Reforms motivated by the realization that demand-side policies to reduce unemployment were ineffective
- Problem were incentives on the supply-side
What is the appropriate model to analyse the reforms?

Just higher benefits in Europe cannot explain why unemployment in the 60s and 70s was lower than in U.S.

Ljungqvist-Sargent (1998, 2007a,b, 2008, ...):

- skill accumulation and decumulation
- earnings dependent unemployment benefits

Explains rise in European unemployment as interaction between benefits and skill loss during unemployment

- Increasing turbulence: higher skill loss if job lost
- If benefit high but skill low: low search and job acceptance
This paper

- Nie introduces detailed institutional features of the German labor market into Ljungqvist and Sargent’s (1998) model
- Focus:
  - analyse the role of the various Hartz IV reform elements
  - role training programs and effect on search incentives
- Uses detailed labor market data (IEBS)
- Estimates certain (crucial) parameters
- Simulates the sequence of reform steps
- Conducts counterfactual experiments
German labor market reforms had countervailing effects

- Only reducing training "subsidy" reduces training enrollment
- Higher proportion of low-skilled unemployed, lower output
- Also reducing benefit duration for all other unemployed
- Fall in unemployment, rise in output
- General fall in unemployment

Simulation of reforms matches actual path of unemployment

Moving to a U.S. style benefit structure (holding training system intact) vastly increases output and reduces unemployment
Very interesting paper on an important issue
Uses a host of institutional details
Careful calibration
Two technical novelties:
  - estimation of transition parameters
  - simulation of the aggregate transitions
Uncovering new aspects of German labor market reforms
Quantitative policy analysis. This is the way to go.
But...
Are the results believable?

- Calibration really convincing, but:
- Rather weak joint effects from actual packages
- Rather strong effects in counterfactual exercise
- Change in benefit duration does not seem to have large effects

Krause and Uhlig (2011) simulate German Labor market reform in Ljungqvist-Sargent model with matching frictions and wage bargaining

- Reduction of duration and benefits both play role (1/3;2/3)
- Search externality on labor demand side: Increased vacancy creation (free entry) increases job finding rate

Effects because of endogenous transition rates!
(Firm-)specific versus general skills
  here, all the skills seem general
  can off-the-job training really substitute for on-the-job training?
  reforms may change structure of technology and skills

Unobserved heterogeneity in the data?
  is there self-selection of workers in training programs?
  maybe measured flow rates capture more than training effect
Computational method to calculate transition path

- solve value function backwards
- like value function iteration, but you do not iterate to unique steady state
- find the path of tax rates (or generally, the equilibrating variable) based on which agents make their choices, so transition ends at final steady state

- This shooting algorithm is simpler than Krusell-Smith
  - very interesting and rather new to macro-labor people

- Emphasize more and explain in detail how tax rate is adjusted
Minor points

- Details of the simulation not well described in the paper
  - what are the various parameter constellations?
  - match reform steps and numbers
- Monthly calibration?
- Some more robustness: change in turbulence
- U.S. benefit system? Is Hartz IV not close?
- Insurance aspect of benefits: refer to Krebs-Scheffel
Interesting and important paper
Insights into the wisdom of German reforms, unintended consequences?
Need to emphasize methods in more detail
Could be taken a step further by
- discussing specific versus general skills
- endogenizing match probability and wage bargaining