

Economic Fluctuations and Retirement of Older Employees

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Questions and Approach

- motivation: labor demand typically ignored in studies on individual retirement behavior
- ? Do economic downturns trigger ER?
- ? Do ER benefits increase with deteriorating cyclical conditions?
- two-stage approach
 - 1 aggregate data: remove quadratic trend from industry-employment
 - 2 micro data: regress transition into ER and ER benefit levels on this residual

Empirical model

- log employment, 1987-2004, separate for 71 industries

$$\ln e_t = \alpha_0 + \alpha_1 t + \alpha_2 t^2 + Z_t, \text{ per } j \quad \rightarrow \hat{Z}_{t,j}$$

- transition to occupational ER scheme, 1992-2000, age 55-67, as LPM

$$ER_{it}^* = x_{it}\beta_1 + \phi(a) + \gamma_{ER}\hat{Z}_{jt} + \theta_j + \nu_t + \varepsilon_{it}$$

- same data, conditional on having transited to ER: pension receipts

$$\ln P_{it} = x_{it}\beta_2 + \delta W_{it} + \gamma_{P1}\hat{Z}_{jt} + \gamma_{P2}\mathbf{1}[\hat{Z}_{jt} < 0]\hat{Z}_{jt} + \theta_j + \nu_t + \varepsilon_{it}$$

Implementation

- transition work → occupational ER
- impute or infer
 - ER status inferred from income receipts:

$$ER_{it} = 1 \text{ if } Y_{ER} = \max\{Y_{UI}, Y_{DI}, Y_{ER}, Y_{work} \dots\} \wedge Y_{work} \leq B$$

- occupational pension scheme (G,L,B,W): partially imputed (esp B/W), else inferred from observed ER outcomes later on
- partly separate regression by occupation since strong differences in instit'l rules

Findings & Contribution

■ findings

- ER countercyclical, $\gamma_{ER} < 0$
- ER benefits higher when times are better/worse than normal
 $\gamma_{P1} > 0$, $\gamma_{P2} < 0$

■ interpretation

- consistent with employers bribing 'unproductive'/older workers out of the workforce in order to break seniority rules

■ overall

- interesting work trying to answer important questions

■ contribution

- first-time evidence for Sweden; provides novel view

Related Work

- papers on labor market transitions in response to agg unempl
- papers on schooling being responsive to cycle
- papers on 'initial macroeconomics conditions' for outcomes later in life
- complementary to policy reform papers using institutional change for identification of labor supply

International and Policy Perspective

- beyond Sweden: many countries have 'expensive ER' plans and want to get rid of them
- ER comes in a number of disguises (disability, unemployment, etc.)
- for subsidized schemes, public policy issue: break implicit coalition of older workers and employers against the taxpayer

Data and Sample

- much imputation needed
 - ER status [→ affects conditioning set, eq (3)]
 - occupation [→ classification error?]
- assumptions needed
 - universal full eligibility: conditional on age, anyone receives full potential benefits [women?, immigrants?]
 - retirement irreversible
- ▶ suggests further sensitivity analysis as to outcomes
- does not capture between-firm heterogeneity on the demand side
 - ▷ firm identifiers available?

Estimation, Modeling, Interpretation

- selectivity
 - receipt of $P|ER$, eq (3) [\rightarrow exclusion restrictions?]
- unaccounted individual characteristics correlated with productivity? [e.g., health \rightarrow indiv FE]
- disregards ER via disability, unemployment etc.
 - changes in importance of competing exit routes over time (substitutability)?
 - are work \rightarrow disability cases counted as not making a transition?
- result much driven by 'public sector employees'
 - local gov't: much of it ALMP \rightarrow comment?
 - central gov't: harder to understand \rightarrow interpretation?
- ER premium effect ($\gamma_{P1} > 0$, $\gamma_{P2} < 0$):
 - rationale for non-monotonicity?

Understanding the Channel: Rationalization and Data

- ER plans typically not unilaterally conceived by single firm but outcome of employer/union negotiations, sanctioned by public sector
 - ▶ no simple **direct** link Δ aggregate demand \rightarrow ER transition
 - paper invokes firms providing **additional** incentives beyond the default to account for cyclicality
- if goal is to identify causal channel of aggregate demand on retirement, may need
 - 1 theory to rationalize firm behavior, in particular
 - labor shedding decisions and incentives as a function of cyclical market conditions, firm characteristics (firm size, market power, cash-flow, etc.) and possibly workforce attributes (composition)
 - differences across occupations
 - 2 testable implications
 - 3 firm level data / matched data
- ▶ develop research agenda