

DISCUSSION OF
"THE CYCLICALITY OF THE OPPORTUNITY
COST OF EMPLOYMENT"
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THE OPPORTUNITY COST OF EMPLOYMENT

The goal is to accurately measure:

$$\underbrace{z_t}_{\text{Flow utility of U}} = \underbrace{\xi_t}_{\text{Leisure component}} + \underbrace{b_t}_{\text{Transfers tied to U}}$$

- ▶ ξ_t :
 - ▶ Use large household model
 - ▶ Estimate C_u/C_e using micro evidence from CEX/PSID
- ▶ b_t :
 - ▶ Programs: UI, SNAP, TANF, Medicaid
 - ▶ Micro evidence to disentangle component tied to U
 - ▶ Aggregate data on dollars spent

Finding: ξ_t , strongly pro-cyclical, b_t counter-cyclical but $b_t \ll \xi_t$, so z_t is pro-cyclical, elasticity wrt productivity ≈ 1

WHY z_t ? AND WHY CYCLICALITY?

- ▶ Ultimately, interested in understanding dynamics of the labor market
- ▶ z_t in the context of DMP:
 - ▶ Surplus from employment $p_t - z_t$
 - ▶ Surplus split by bargaining, worker bargaining power determines w_t
 - ▶ Firm profits $\pi_t = p_t - w_t$
 - ▶ To generate dynamics need volatile π_t , can be achieved by depending on level and cyclical of w_t
 - ▶ If elasticity of z_t wrt p_t is less than that of w_t , can adjust level and bargaining power to generate volatility

THE LARGE HOUSEHOLD

$$\xi_t = \frac{\overbrace{[U^u(C_t^u, 0) - \lambda_t C_t^u]}^{\text{Leisure of Unemployed}} - \overbrace{[U^e(C_t^e, 0) - \lambda_t C_t^e]}^{\text{Leisure of Employed}}}{\underbrace{\lambda_t}_{\text{Marginal utility wrt } C}}$$

What happens when p increases?

- ▶ Wages of employed increase \Rightarrow household is wealthier
- ▶ Consumption of employed goes up $\Rightarrow \lambda \downarrow$
- ▶ Perfect risk sharing between E & U \Rightarrow consumption of unemployed goes up
- ▶ High wages of E subsidized U
- ▶ Pro-cyclical $w \Rightarrow$ pro-cyclical ξ_t

CONSUMPTION VS EXPENDITURE

- ▶ Aguiar & Hurst (2005):
 - ▶ Expenditure \neq consumption
 - ▶ Drop in C associated with expenditures associated with work (e.g. meals away from home)
- ▶ Kaplan & Menzio (2013): Unemployed pay less for same goods
- ▶ Use CEX for shares, but NIPA for aggregate?
 - ▶ Aggregated CEX under measures consumption
 - ▶ Less volatile and less pro-cyclical than NIPA
- ▶ What about service flows from durables?

INCOMPLETE MARKETS/HETEROGENEITY

Why not calibrate model a la Krusell, Mukoyama & Sahin with benefit eligibility/take up?

BUT, Chang & Kim (*AER* 2007,2014):

- ▶ Incomplete markets, endogenous extensive labor supply, heterogeneity in productivity
- ▶ No benefits, $b_t = 0$, only ξ_t component
- ▶ Opportunity cost is pro-cyclical, but $\hat{\epsilon}(\xi, p) \ll 1$
(Consistent with Koenig, Manning & Petrolongo 2014)
- ▶ Individual reservation wages don't move much, but distribution of reservation wages.
- ▶ Volatility comes via marginal worker changing

VALUE OF BENEFITS

Authors find $b = 0.041$ marginal product of employment:

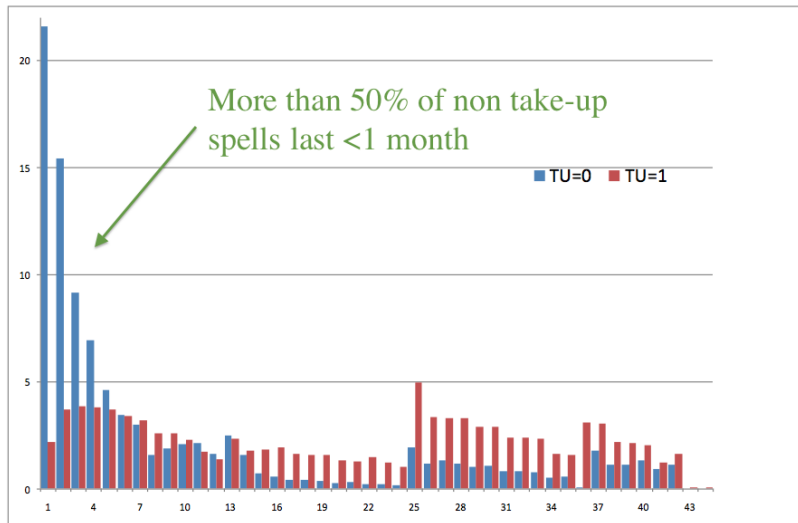
- ▶ $b_t \approx$ aggregate dollars spent on UI divided by number of unemployed divided by GDP per capita, net disutility of take-up

At micro level (Auray, Fuller & Lkhagvasure 2014):

- ▶ Fraction eligible $\approx 60\%$, Take up $\approx 75\%$
- ▶ Receive 45% of previous earnings \Rightarrow
 $0.66 \times 0.75 \times 0.45 = 0.223$
- ▶ b relative to individual productivity the relevant margin

Why convex cost of take-up? Stigma goes up in recessions?

TAKE-UP RATES



Distribution of U duration by take-up, Blasco & Fontaine (2012)

RECONCILE b WITH THE LIT

- ▶ Huge literature looking at the effects of UI on unemployment (e.g. Meyer, Katz & Meyer, Card & Levine+ many more)
- ▶ Chetty (2013) Consensus: 10 week benefit extension leads to 1 week increase in unemployment duration
- ▶ Rothstein (2011) and Farber & Valletta (2013) conclusively showed not because of search effort
- ▶ Hagedorn, Karahan, Manovskii & Mitman (2013): 10 week extension leads to 1.1 week increase in duration

PHILOSOPHY OF THE EXERCISE

Want to identify z_t

- ▶ Use model A to identify z_t
- ▶ Given z_t from model A, say model B is bad

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Why not the opposite?

- ▶ Use HM to identify z_t
- ▶ Given z_t from HM, say CRK is bad