Spousal Insurance, Precautionary Labor Supply, and the Business Cycle

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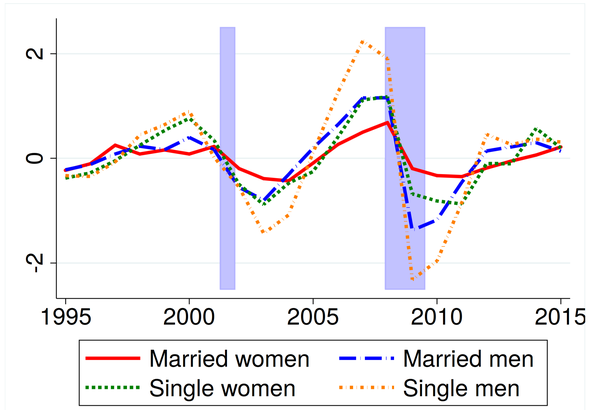
Motivation

Figure 1: Detrended employment cyclicality



Married women have the lowest employment cyclicality compared to married men and single men and women

Hypothesis

- **Precautionary Labor Supply:** Married women remain employed and choose to not quit in recessions in response to husband's higher job loss risk
- This countercyclical employment response will dampen the employment cyclicality for married women in the aggregate

Research Question

How much of the cyclicality in employment for married women is due to spousal insurance and what are the implications for intra-household risk sharing?

Quantitative Model

- Married women's labor supply decisions are determined by the interaction of idiosyncratic shocks and aggregate risk
- Quantify implications of cyclicality of husband's labor market risk for precautionary labor supply and intra-household risk sharing
- Incomplete assets model (Bewley-Hugget) with labor market frictions based on Krusell et al. (2007) and Mankart et al. (2016)
- Unitary household comprised of husband and wife
- Extensive labor supply decisions: Wives can be fired, otherwise endogenous moves between employment, unemployment, and Nilf
- Gender-specific labor market frictions and labor income
- Recessions: periods of low job finding and high job loss probabilities
- Job loss correlated among spouses
- Exogenous wage rates and interest rate

Result 1

Transition rate	Data	Model
E-to-N	-0.2514	-0.1563

- Coefficient from regressing log transition rate on log unemployment rate in data and model negative
- Cyclicality of risk accounts for about 62% of the procyclical E-to-N transition rate

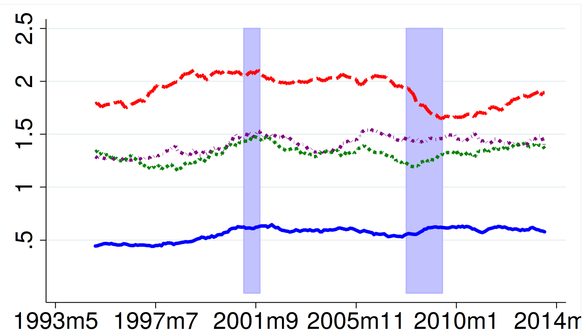
Result 2

- Compare baseline model to single-earner married model (Assumption: Married women never work, married men as in baseline model)
- Compute consumption ($\text{Var}(\Delta c)$) and income volatility ($\text{Var}(\Delta y)$) in baseline model single-earner married model following Blundell et al. (2008)
- $\frac{\text{Var}\Delta c}{\text{Var}\Delta y}$ is 30.89% lower in the baseline model than in the single-earner model

Transition Rates

Use short panel in CPS monthly files and link individuals across subsequent months to obtain transition rates

Figure 2: Employment-to-Not in the labor force (E-to-N) transition rates



Married women are less likely to leave employment into not in the labor force in recessions (procyclical E-to-N transition rates)

- Cyclicality of transition rates as a linear regression of each log transition rate on log unemployment rate
- For married women:
  - Procyclical E-to-N transition rate: If the unemployment rate doubles, E-to-N declines by 25.14%
  - Acyclical E-to-E transition rate
  - Countercyclical job loss (E-to-U) similar to single women
- Procyclical E-to-N transition rate offsets the increase in job loss and thus leads to acyclical E-to-E transition rate

Transition rate	Married women	Married men	Single women
E-to-E	0.0024**	-0.0072***	-0.0031***
E-to-U	0.4950***	0.7946***	0.4633***
E-to-N	-0.2514***	0.1863***	0.0691

Decomposition

Test three counterfactuals and compare to baseline model:

1. Assign married men's labor market frictions to married women:
   Married women provide 50% less spousal insurance
2. Assign both genders married men's productivity process:
   Married women provide 8% less spousal insurance
3. Uncorrelated job loss:
   Married women provide 37% more spousal insurance

References

Blundell, R., L. Pistaferri, and I. Preston (2008): "Consumption Inequality and Partial Insurance," American Economic Review, 98(5), 1887–1921.

Krusell, P., T. Mukoyama, R. Rogerson, and A. Sahin (2017): "Gross Worker Flows over the Business Cycle," American Economic Re- view, 107(11), 3447–3476.

Mankart, J., and R. Oikonomou (2016a): "Household Search and the Aggregate Labour Market," Review of Economic Studies, 84(4), 1735–1788.

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