

Discussion of
"Optimal Unemployment Insurance with Credit"

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Philadelphia Workshop on Macroeconomics and Economic Policy
April 6, 2019

Summary reaction

Contributions:

1. Provides a new framework to analyze the interactions between unemployment insurance, borrowing and default.
2. Quantifies the optimal unemployment insurance: (i) levels (ii) slope and (iii) cyclicalities

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My take on the paper:

- Very interesting project on important topic! I learned a lot.
- It is a fairly complicated model. A lot to unpack to understand the results.
- Some concerns/questions about the policy restrictions, modelling choices and quantitative performance.

What is the optimal design of unemployment insurance (UI)?

Framework:

Standard DMP model with search intensity and exogenous separation
+
Consumption/savings problem with labor prod. and unemployment risk
+
Unsecured credit with default option
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Aggregate productivity risk

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Policy experiments:

- Choose the UI replacement rate to maximize: (i) Ex-ante expected life-time utility of a newborn (ii) Average steady-state welfare
- Choose the slope of UI to maximize welfare.
- Welfare implications of the cyclical of UI replacement rate.

Main findings

1. **Level and slope:** (i) zero unemployment benefits (ii) slope second order to the level.
2. UI benefits and unsecured credit are **substitutes**. Interaction of the credit and labor market frictions is key.
3. **Cyclicality:** countercyclical UI benefits are welfare improving. Higher UI and less default in recessions lead to better consumption smoothing.

Mechanism: $UI \downarrow$ and $\tau \downarrow$

1. Direct impact:

- Less insurance \Rightarrow Precautionary savings \uparrow , Search intensity \uparrow
- Debt \downarrow + **Default rate** \downarrow
- Wage \downarrow (meager effect)

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3. Endogenous borrowing constraint channel:

- **Lower default rate** $\Rightarrow q(\cdot) \uparrow \Rightarrow$ Relaxed borrowing constraint \Rightarrow Savings \downarrow
- Relaxed borrowing constraint \Rightarrow Ex-ante welfare \uparrow
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4. Fiscal adjustment channel:

- $\tau \downarrow \Rightarrow$ Positive income effect + Riskier income \Rightarrow Counterforce to 3.

Discussion

1. Restrictions on the set of policy instruments.
2. The quantitative importance of endogenous borrowing constraint vs. labor search channel.
3. Interactions of the credit market and labor market frictions.
4. Business cycle properties of the model.

(1) Restrictions on the set of policy instruments

- UI policy rule in the paper:

$$\zeta(h', u') = \max \{ \tilde{\phi}, \min \{ \bar{\phi}, \phi_u h' \bar{w} \} \} \quad \text{for } u = 1, 2, \dots, \bar{u}$$

- Simple policy experiment: (1) $\phi_u = \phi_1$, (2) $\bar{\phi}, \phi_u$ moved by the same percentage points Δ_ϕ

Question:

Can the planner do better without conditioning on the history?

1. Asset Means-Testing: provide insurance to high MPC agents.
2. Targeted benefits for agents with bad credit: their insurance opportunities are the worst.

(2) Labor search channel dominates?

	Base	Only UI	+ w	+ v	+ q	+ τ
ϕ_1	0.461	0.061	0.061	0.061	0.061	0.061
ϕ	0.512	0.112	0.112	0.112	0.112	0.112
τ	1.95	1.95	1.95	1.95	1.95	0.610
CEV (ex-ante)	0.000	-2.921	-3.227	-0.580	+0.041	+1.335
CEV (avg)	0.000	+1.320	+0.984	+5.551	+5.166	+6.492
UR (%)	5.670	4.628	4.605	3.967	3.904	3.954
% in debt	48.51	17.94	18.09	22.76	50.29	46.62
Debt/inc	7.969	2.049	2.075	2.679	9.617	9.081
% default	0.955	0.385	0.388	0.359	1.023	0.986
$C_{u=0}$	0.9598	0.9919	0.9887	1.0237	1.0022	1.0325
$C_{u=1-6}/C_{u=0}$	64.09	67.89	67.90	70.42	74.06	72.44

- CEV (ex-ante): **+2.64**, CEV (avg): **+4.57**
- Order of decomposition matters here.
- **Key model object:** elasticity of vacancies with respect to UI crucial.
Where does the discipline for this come from?

(3) Nexus of the credit and labor market frictions

- Job finding rate depends on the default status only through search intensity. The number of vacancies posted f_h is independent on the credit history.
- **Counterfactual:** Empirical evidence the role of credit history for the job finding rates and vacancies - [Dobbie, Mahoney and Song \(2016\)](#), [Cortes, Glover and Tasci \(2018\)](#), [Herkenhoff, et. al. \(2016\)](#).
 - As of November 2018 only 11 states have banned the employer credit checks for at least some jobs.
- Importance of this channel: [Corbae, Glover \(2018\)](#). Ignoring credit scores in hiring:
 - Workers lose some of their incentives to repay debts. This leads to higher interest rates and less borrowing \Rightarrow Welfare \downarrow .

Question:

Why should we ignore this channel in the design of the optimal UI policy?

(4) Business Cycle Properties of the Model

- Step back from the normative analysis: Is this model a good “laboratory” to study the optimal policy? Does it replicate business cycle properties of the labor market variables?
- Separation rate λ is **exogenous** in the model.
- [Fujita and Ramey \(2012\)](#) find that DMP model with exogenous separation fails to produce:
 - Sufficient volatility of unemployment and vacancies.
 - Counter-cyclicality of the EU and UE flows.
 - Substantial variability of the separation rate (by construction).

Question:

How well does the model perform vis-a-vis the data in terms of:

- (i) volatility of the labor market variables?
- (ii) labor market flows?

Conclusions

- **Key takeaway:** borrowing with default and labor market search friction interact with each other. Interaction is quantitatively important and crucial for the **design of the optimal UI** policy.
- I am looking forward to the draft!