Discussion of
"Labor Market Upheaval,
Default Regulations, and Consumer Debt"
by Athreya, Sanchez, Tam, and Young

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Policy Analysis in the Post Great Recession Era
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Question

- How much did changes in labor market risk (as measured by job seperation and finding rates), along with the Bankruptcy Abuse Protection and Consumer Protection Act (BAPCPA) enacted in 2005, alter the paths of bankruptcy, delinquincy, loan pricing, and unsecured credit use over the Great Recession?

Background

- Three observations for the past decade:
  - An increase increase in labor market risk the Great Recession, and higher default rates
  - A decline in the volume of unsecured debt
  - The bankruptcy reform: made delinquincy less costly relative to bankruptcy, hence causing switches from bankruptcy to delinquincy.

The model

- Extends the Athreya, Sanchez, Tam, and Young (2012) life-cycle model with delinquincy to a quarterly model with exogenous job finding (λ^E, λ^N) and separation rates δ.
- Households face uninsured idiosyncratic risk in employment and wage uncertainty.
- Wages (w) depend on education (e), age (a), match-specific productivity $(m \sim N(0, \sigma_m^2))$ and permanent shocks $(\Delta n \sim N(0, \sigma_\xi^2))$.

Household's decisions in the credit market

- Solvency
  - Cost: Pay back b
  - Benefit: Access to credit at price $q(b', \mathbb{I})$ which depends on the amount of borrowing b' and household state
    $\mathbb{I} = (e, a, n, m)$.

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- Delinquency
  - Cost: Fraction η of income is garnished if working, in addition to utility loss ψ_D.
  - Benefit: Do not have to pay back b immediately, renegotiate next period's debt repayment to $b' = h$.

Loan pricing

$$q(b', \mathbb{I}) = \frac{1}{1+r} \text{for } b \geq 0$$

$$q(b', \mathbb{I}) = \frac{E[Q_{pay} + Q_{dq}]}{1+r+\phi} \text{ for } b < 0$$

where

$$Q_{pay} = \mathbf{1}^{O,P}(b', \mathbb{I}', u', s') + \mathbf{1}^{U,P}(b', \mathbb{I}', u', s') + \mathbf{1}^{H,P}(b', \mathbb{I}', u', s')$$

$$
\begin{aligned}
Q_{dq} &= \frac{\mathbf{1}^{O,D}(b', \mathbb{I}', u', s')}{b'}[q^O b^O(b', \mathbb{I}') + \eta \mathbf{y}(\mathbb{I})] \\
&+ \frac{\mathbf{1}^{U,D}(b', \mathbb{I}', u', s')}{b'}q^U b^U(b', \mathbb{I}') \\
&+ \frac{\mathbf{1}^{H,D}(b', \mathbb{I}', u', s')}{b'}q^H b^H(b', \mathbb{I}')
\end{aligned}
$$

Loan pricing

- Lenders optimize and adjust the existing debt to maximize the value of expected repayments:

$$b^l(\mathbb{I}) = \arg\max_h \{q^l(h, \mathbb{I})h\}$$

- Hence, lenders trade off the face value of the debt for the likelihood of repayment (reflected in q).

Calibration

- The model is calibrated to pre-2005 data.
- Parameters that are assigned directly (that don't match any targets) from Low, Meghir and Pistaferri (2010).
- Other parameters:

Other parameters	
BK filing rate for employed $\Delta(1)$	\$1200
BK filing rate for unemployed $\Delta(0)$	\$600
Annual discount factor β	0.947
BK utility cost ψ_B	1.785
DQ utility cost ψ_D	0.103

Calibration fit

Moment	Data	Model
Mean assets/income	4.07%	3.09%
Bankruptcy rate	0.26%	0.26%
Share of debt in 90+DQ	8.9%	7.8%

The experiment

- Great Recession: Unanticipated, permanent shocks to job finding (λ^E, λ^N) and separation rates δ five times to match post-2005 data on unemployment rates and durations.

- Bankruptcy reform: A pre-announced 50% rise in bankruptcy filing costs $\Delta(p)$.

- The target is to match the credit market data (bankruptcy and delinquincy) - success!

# Key results: Percentage of households filing for bankruptcy
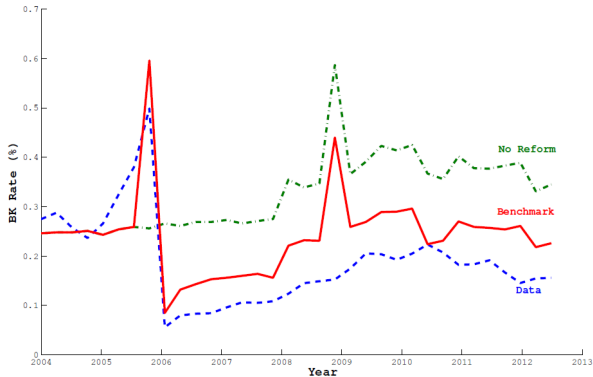
The model captures the rush to declare bankruptcies due to the anticipation of the reform one period before enaction.

Key results: Percentage of debt in delinquincy
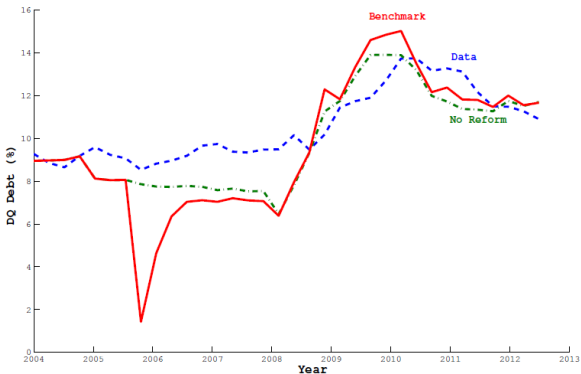
Households who have been holding delinquent debt discharge it on
impact—discrepancy with the data, possibly due to measurement of
delinquent debt in data.

Key Results: Aggregate debt during the Great Recession
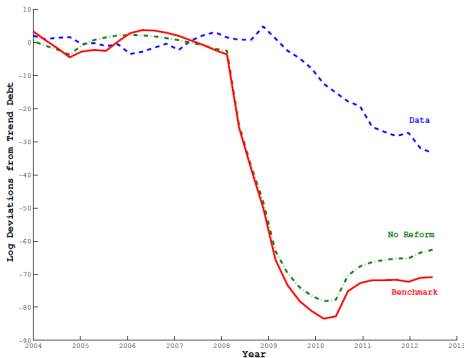
- The model predicts a sharp decline in debt due to its over-sensitivity to overall conditions.
- Imperfect competition in the credit card lending could deliver insensitive interest rates (Ausubel, 1991).

Comments

Welfare analysis

- The bankruptcy reform made it costlier to file for bankruptcy.

- Supporters: "Soft" bankruptcy law motivated households to borrow more than they could afford, with the bankruptcy option in mind, then repay less than they could afford in the event of bankruptcy. (Nunez and Rosenthal, 2006)

- Opponents: Stress "bad luck" leading to bankruptcy: illness, unemployment, divorce—imposing limitations to consumption-smoothing.

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- Did the Bankruptcy Abuse Prevention and Consumer Protection Act work?

- The paper suggests it worked in the sense that it likely suppressed bankruptcy filings; it reduced consumption-smoothing ability on aggregate.

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    - Time costs from court dates and legal proceedings, social stigma (ψ_B)

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- Consumption smoothing (Athreya, 2002):
    - Bankruptcy helps avoid temporary loss of consumption, improves consumption-smoothing ability.
    - Interest rates reflect borrowers' risk of default: higher bankruptcy risk implies higher interest rates which hurts consumption-smoothing ability.

Welfare analysis: aggregate implications

- The paper suggests the reform imposes limitations on consumption-smoothing on aggregate.
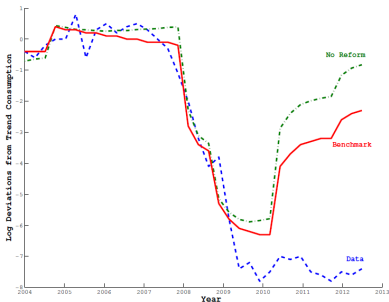
Welfare analysis: cross-sectional implications

- What are the welfare gains/losses across households of different age, income and educational attainment?

- What fraction of population is in favor of the reform?

- Liquidity-constrained households are likely to have the most to gain from bankruptcy, yet they are the ones screened out by high fees (Gross et al, forthcoming).

Welfare analysis: liquidity-constrained households

- A 2-period model (Gross et al, forthcoming)
- In period 1, recieve wealth $w \sim f(W)$, borrow an amount B.
- In period 2, either pay debt or file for bankruptcy (pay bankruptcy fee c, fraction e of wealth is exempt from bankruptcy).
- Threshold B is calculated by comparing wealth after bankruptcy $\left(e \cdot (W - c)\right)$ with wealth after repayment of full debt $W - B$.
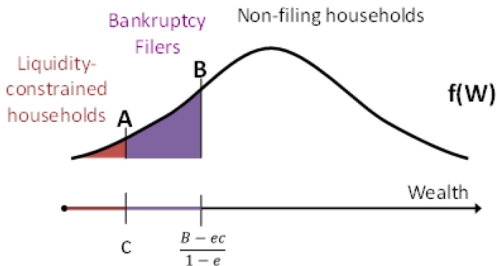
Conclusion

- A very thought-provoking paper of household default capturing the credit market dynamics well.