Discussion

Delayed Crises and Slow Recoveries

by Xuewen Liu, Pengfei Wang, and Zhongchao Yang

Eduardo Dávila

Yale and NBER

CICF 2021

This Paper

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  - Expansions and crises are driven by coordination
  - Not all agents are aware of economic conditions $\Rightarrow$ Synchronization problems (AB02,03)

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  - Model of investment in two sectors (speculative and traditional)
  - Banks must decide when to "exit"
  - High speculative payoffs only when many investors active
  - Crisis eventually happens $\Rightarrow$ Fire sale/downward sloping price

Synchronization Problem + Fire Sales

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Synchronization Problem + Fire Sales

- **Main result:** normative analysis
  - Planner would like to "exit" before than banks
  - Why? Pecuniary externalities in crises

Outline of the paper

1. **Model with exit**
2. Model with entry and exit
3. RBC version with entry and exit

Summary

- Continuous time, measure one of banks
- Two sectors
  - Traditional: flow c^L
  - Speculative: flow c^H if $\omega(t) \geq \underbrace{S(t)}_{=\frac{\alpha-\theta(t)}{\beta}}$, 0 (crisis) otherwise

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- Continuous time, measure one of banks
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  - Traditional: flow c^L
  - Speculative: flow c^H if $\omega(t) \geq \underbrace{S(t)}_{=\frac{\alpha-\theta(t)}{\beta}}$, 0 (crisis) otherwise
- $\omega(t)$ is share of investors in speculative sector, $S(t)$ is fundamental
- Shock hits the economy at t_0, $S(t)$ starts to go up
  - It becomes harder and harder to sustain the high payoff

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- **Remark**: there is some probability of refinancing $p\left(L\right)$
  - Is it needed?

Equilibrium

- Crises happens at $t_0 + \zeta$, with

$$\zeta(\tau) = \frac{\tau + \eta}{1 + \frac{\kappa}{\beta}\eta}$$

- Obviously, $\zeta'(\tau) > 0$ if agents wait more to exit, the crisis happens later
- Paper shows that liquidation is lower when ζ is higher, $\ell'(\zeta) < 0$

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- **Competitive equilibrium**
  - Banks choose waiting length τ taking prices as given
- Remark: welfare here is far from obvious
  - This is a strategic environment, no welfare theorems to help
  - Cooper/John 88: quite the opposite
  - Equilibria are often Pareto ranked in coordination games

Main Result

- Main result: compare SB with CE

$$\frac{dW^P}{d\tau} - \frac{dW^C}{d\tau} = \underbrace{\overbrace{\frac{d\zeta}{d\tau}}^{>0} \frac{\partial \Psi(\tau,\zeta)}{\partial \zeta}}_{\text{not internalized}}, \quad \text{where}$$

$$\frac{\partial \Psi(\tau,\zeta)}{\partial \zeta} = \underbrace{(\Sigma - \Pi(\ell))\frac{1}{\eta}}_{\text{part 1 } (+)} + \underbrace{c^H \omega}_{\text{part 2 } (+)} + \underbrace{(\Sigma - 1)\omega(-v)}_{\text{part 3 } (-)}$$

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  - Part 1 captures banks that escape failure
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- Part 3: distributive pecuniary externality (GP86, L08, HK16, DK18, ...)
  1. Differences in valuation $(\Sigma - 1)$
  2. Total sale ω
  3. Price sensitivity $v \equiv \frac{dq}{d\zeta}$

Comments/Thoughts

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3. It may helpful to provide a characterization of the first-best
   - I think the first-best solution is to set:

$$\omega(t) = S(t)$$

   - Keep as many banks in as you can so that the music doesn't stop (at some point $\omega(t) = 1$)
   - Connect more first-best and second-best?

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6. The RBC extension is interesting by itself
   - It may be worth developing in a different paper
   - Connection to macro literature on coordination and business cycles
     - Small modern literature
   - Slow recoveries is in the title, but it only comes at the very end!