

The Great Recession: A Self-Fulfilling Global Panic

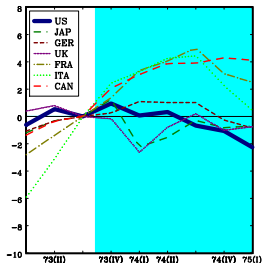
by Philippe Bacchetta and Eric van Wincoop

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Minneapolis Fed & NBER

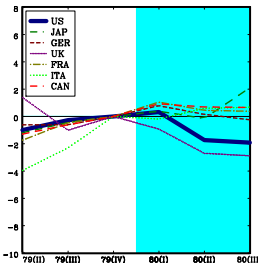
NBER IFM, October 2013

Background

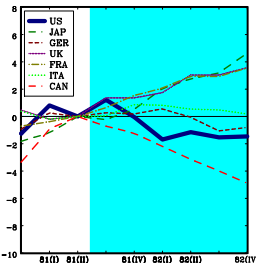
1973 Recession



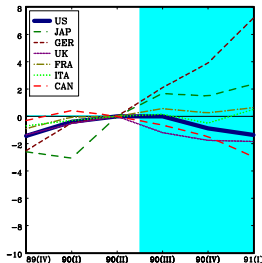
1980 Recession



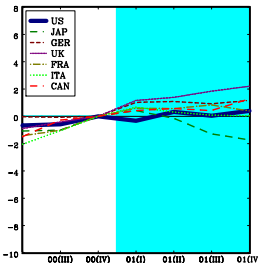
1981 Recession



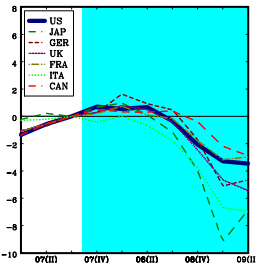
1990 Recession



2001 Recession



2007 Recession



The questions

- Why was the 2008 crisis so synchronous across countries?
- Can the high synchronization help us understand the cause of the recession? In particular is it suggesting a switch from good to bad equilibria?

Results and takeaways

- Results
 - **Self fulfilling low output expectations** Households expects low future output -> lower current demand -> nominal rigidity implies low current output/profits -> fixed operations costs imply firms exit -> exit of firms validates low income expectations
 - Extending this set-up to 2 countries, show recessions are necessarily synchronous, as long as there is some (not complete) trade integration

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 - Extending this set-up to 2 countries, show recessions are necessarily synchronous, as long as there is some (not complete) trade integration
- Takeaways
 - Synchronization indication of low demand trap
 - Policies that stimulate demand can be very effective

Plan

- More intuition for key theory result
- What type of global self-fulfilling crisis? Demand or credit?

A closed economy with continuum of equilibria

$c = y$, Demand

$y = c$, Market Clearing

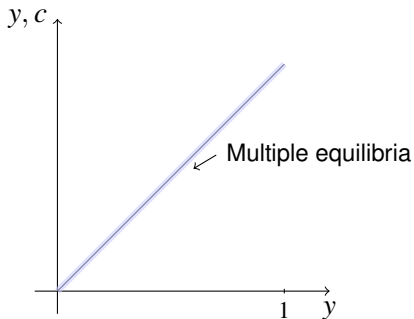
$y \leq 1$, Capacity constraint

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An open economy with multiple equilibria

$$c = \psi y + (1 - \psi)y^*$$

$$c^* = \psi y^* + (1 - \psi)y \quad \text{Demands}$$

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- If $\psi = 1$ (Autarky), all $y, y^* \leq 1$ are possible equilibria

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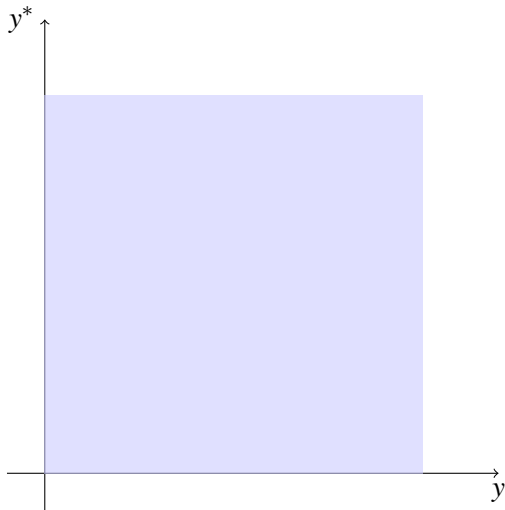
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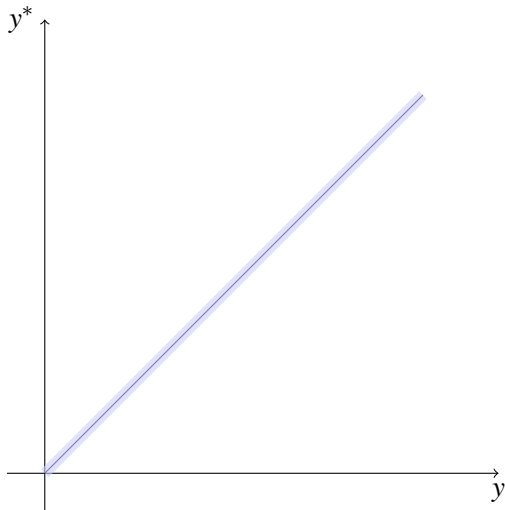
$$y, y^* \leq 1, \quad \text{Capacity constraints}$$

- If $\psi = 1$ (Autarky), all $y, y^* \leq 1$ are possible equilibria
- As long as $\psi < 1$ (some integration) demands imply $y = y^*$

Range of Multiple Equilibria, $\psi = 1$



Range of Multiple Equilibria, $\psi < 1$



Intuition

- Trade integration (at any level), makes demand linearly related
- Since demand = output, output also linearly related
- Multiple equilibria plus integration reduces dimensionality of equilibrium space, equilibrium output are necessarily correlated

An alternative self-fulfilling global crisis (Perri and Quadrini, 2012)

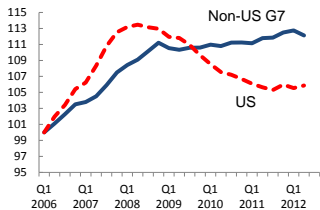
- Firms use credit to hire workers
- Credit depends on resale price of capital
- Resale price depends on whether firms are constrained or not
- Multiple equilibria in credit markets
 - Markets expect low resale prices
 - Low resale prices -> tight credit
 - Tight credit validates low resale prices
 - Hiring collapses

An alternative self-fulfilling global crisis (Perri and Quadrini, 2012)

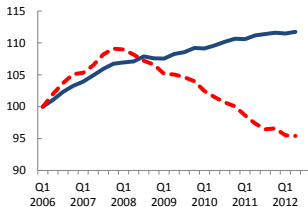
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- If financial markets integrated, expectation of low resale prices are coordinated across countries
- Recessions can be driven by self-fulfilling global, credit crunches

Was the 2008 recession a global credit crunch?

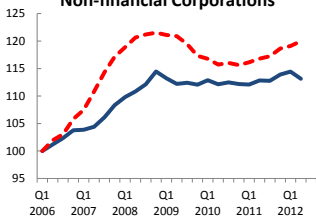
Private sector



Household



Non-financial Corporations

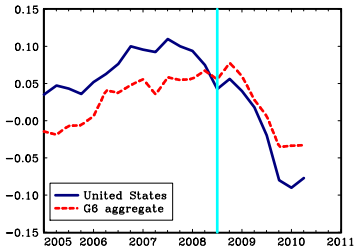


Source: Bank for International Settlements, *Long series on credit to private non-financial sectors*. The credit series are divided by the GDP deflator and normalized at 100 in 2006:Q1. The non-US G7 series is computed using relative PPP-adjusted GDP weights.

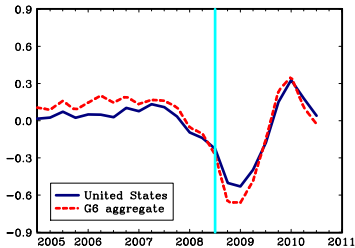
No?

Was the 2008 recession a global credit crunch?

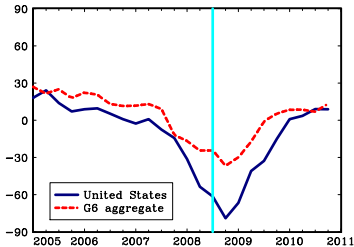
Growth in Stock Prices



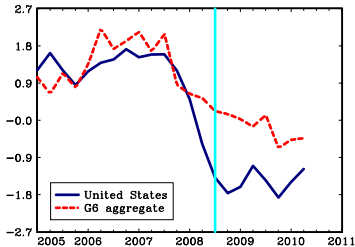
Growth in Net Business Debt



Percent Loan Officers Easing Credit



Credit COnditions Index



Yes?

Was the 2008 recession a global credit crunch?

- Not so global in total credit
- Certainly global in business credit!

Conclusion and policies

- Key insight: high international synchronization in 2008 crisis, for countries with different fundamentals, strong hint of multiple equilibrium
- Is crisis driven by pessimism in asset prices (PQ) or in demand (BV)?
- Both mechanism generate international recessions, but policy implications different
- Global demand crises calls for standard demand policies, global asset prices calls for less conventional policies (TARP)
- The fact that both were used suggest both mechanism possibly at work