A Unified Approach to Credit Crunches, Financial Instability, and Banking Crises

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* This presentation should not be reported as representing the views of the IMF. The views expressed are those of the author and do not necessarily reflect the views of the IMF or IMF policy.

- Summary of the paper
  - Overview
  - Setup
  - Mechanism
- General comments
- Specific comments

Overview

- Aims to capture in one model the whole scope of phenomena from firm default via capital crunch and financial instability to bank default.
- Does this by endogenizing loan losses.
- Losses depend on macro variables.
- Amount of losses determines state of the economy.

Setup

- OLG general equilibrium model.
- Real assets, consumption goods.
- Households, Firms.
- Banks act as the sole payment system.

Mechanism

- Shock to asset prices
- Affects the price level
- Can lead to firm defaults
- Which leads to loan losses and lower capital for banks
- Can lead to a credit crunch, with a multiplier effect to asset prices.
- In extreme cases this can lead to bank defaults.

General Comments

- Appealing unifying framework.
- Generally well-written.
- Link between the model and two historical cases is explores in case studies on Japan’s lost decade and the Great Depression.

- Although the model explores different equilibria, which equilibrium prevails depends on an exogenous asset price shock. Hence hard to derive *policy conclusions*: e.g. no clues as to what to do to prevent asset price decline.

Specific Comments

- Model is not quite as unifying as it seems: *Link between households and firms* is assumed to be very weak, while households own firms. Examples:
  * losses by depositors do not feed back into firms.
  * production decision is not internalized by households.

- Role of the *banking system* is too limited.
  Banks only ‘choose’ dividend policy, nothing else.
  Essential function of the banking system as allocator of productive resources are not modeled.

- No *recapitalization* is allowed, even when recapitalization might be profitable on a NPV basis. If recapitalization is allowed, some phenomena might no longer occur in the model.

- In reality, a *capital crunch* may emerge even when banks' capital constraint is not binding, as banks may endogenously choose to hold more equity than prescribed by the constraint (see e.g. Bolt & Tieman, SJE forthcoming).

Monetary side raises questions:

- Should monetary policy do anything w.r.t. asset prices? Your answer: “only to the extent that it affects banks’ balance sheets”. What about the build-up of risks during asset price booms?

- After a shock: Monetary policy can only help if it is *timely* and *bank fundamentals are good* at the time of the shock.
  Monetary policy powerless if fundamentals are already less than good?

- Related: Every time a household spends money (draws down its deposits), this is deemed a monetary contraction.
  What would this mean for monetary policy in this model?

Conclusion that "*a policy preventing deflation [is not sufficient to guarantee] financial stability*" is exactly why monetary policy and supervision are related, but separate issues.