

*Financial (in)stability, supervision and liquidity injections: a
dynamic general equilibrium approach*
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Agenda

Summary:

This paper extends Goodhart *et al.* (2004,2006) in a dynamic setting without money using a RBC methodology

Topics for Discussion:

- 1 Modelling approach
- 2 Comments
- 3 Extensions

Heterogenous banking sector with default

- Endogenous default under the existense of default penalties (Shubik & Wilson, 1977, Dubey, Geanakoplos & Shubik, 2005)
- Individual default by firms can spill over the economy through the interbank market and banking default (Tsomocos, 2003, Goodhart, Sunirand & Tsomocos, 2004,2006)
- Monetary policy by the Central Bank via setting the money supply, thus letting the interbank rate equilibrate the interbank market
- Regulatory policy via capital requirements
- Dynamic setting enables testing of the model and has implications for intertemporal monetary policy

Advantages

- Heterogeneity & Dynamics
- Interbank Market
- Endogenous Default
- Optimizing Banks

Absence of money

- Money is not explicitly modeled
- Positive value of money (i.e. resolution of the Hahn's paradox) is not shown
- All trade occurs with the numeraire good and, hence, monetary policy is conducted through the injection or withdrawal of the numeraire good
- No distinction between the nominal and the real interest rate (i.e. No Fisher Effect)
- Central bank affects the real interest rate

Absence of money

- Without modelling money markets explicitly it is difficult to discuss inflationary pressures
- The Liquidity Structure of Interest Rates and the Fisher effect do not obtain
- Default happens only because of production shocks
- Liquidity and default that are essential ingredients of financial fragility are not investigated

Housing crises

- **Goodhart, Tsomocos and Vardoulakis (2008)**, working paper
- They extend Goodhart *et al.* (2004,2006) by introducing housing and mortgage markets
- Agents pledge the housing they purchase as collateral, which the bank seizes and resells when they default
- They perform a number of comparative statics including shocks in the money supply, banks' capital, endowments, liquidity assistance to banks and banks' risk-aversion

Default in an international environment

- **Peiris (2008)**, working paper, Oxford University
- Considers default in an international setting with money and trade
- Financial decisions of agents and decisions to default affect the span available to other agents and hence the spanning opportunities to the economy
- Financial flows may be greater than flows into commodities - portfolio flows directly linked to current account deficits and effectiveness of monetary policy

Low Default Penalties

- **Peiris and Vardoulakis (2008)**, working paper, Oxford University
- When default penalties are low, trade vanishes as agents default completely on their obligations
- They show that partial (non-zero) repayment can be guaranteed given a requirement to set aside a certain amount of money before the resolution of uncertainty
- Reserve requirements (not in the form of collateral) can facilitate trade in low default penalties situations
- Financial institutions such as hedge funds that are less strictly regulated can be modelled within this framework