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Session 1

Interbank lending

Financial (in)stability in Chile

E.Kazakovai, J-F Martinez, M.U. Peiris and D.P.Tsomocos

National Research University Higher School of Economics, Russian Federation

Central Bank of Chile

University Higher School of Economics, Russian Federation

Saïd Business School and St. Edmund Hall, University of Oxford.

Comments

Cristián Echeverría V.

Head, Center for Business and Economics Studies

Universidad del Desarrollo

Comments to:
Financial (in)stability in Chile.

Kazakova, Martinez, Peiris and Tsomocos.

Introduction

What is the paper about?

Comments on the methodology

Conclusions

Introduction

Real economic (copper price, TFP) shocks, transmission mechanism and financial stability.

Very relevant for financial policymaking in small open economies.

What is the paper about?

Model

Partial equilibrium, neo-keynesian model, and an overlapping generations structure of firms and banks.

Evaluates strategic default by firms, and the financial stability implications of real economy shocks when there is bank size heterogeneity.

In particular, evaluates the effect of real shocks on the financial stability and macroeconomic performance of the economy.

What is the paper about?

Model assumptions

Bank's, firm's and household's default is an equilibrium condition.

Endogenous (strategic) default allows modeling risk taking behavior by firms, and justifies prudential regulation of banks.

What is the paper about?

Model structure

OLG structure of firms and banks.

$t = 0$: Firms issue non-state-contingent nominal unsecured debt (bonds) to banks, and choose to default on some of their obligations, subject to a renegotiation cost that fluctuates with the business cycle.

$t = 1$: Firms liquidate assets, and pay dividends net of renegotiation costs.

What is the paper about?

Model structure

Euler condition for firms:

Trade-off between

marginal value of additional dividend payments to shareholders v/s additional effort-cost of renegotiating debt when the firm is unlucky and realizes a low productivity.

What is the paper about?

Model structure

Euler condition for banks:

Large banks lend to pool of risky firms, i.e diversified loan portfolio (exposed only to aggregate risk).

Small banks lend to only one kind of firm, i.e. concentrated loan portfolio (fully exposed to idiosyncratic risk).

Defaults get transferred from firms to banks. It's the source of financial instability in the model.

What is the paper about?

Impulse responses

Negative copper price shock

- currency depreciation
- consumption reallocation toward domestic goods.
- negative income effect
- increase in the labor supply (?)
- aggregate demand and production decrease
- increase in interest rates
- increase demand for labor (?)
- reduced loans and profits => financial instability

What is the paper about?

Impulse responses

Negative TFP shock

- aggregate demand and production decrease
- increase in interest rates
- reduced loans and profits
- increased default rates => financial instability

Comments on the methodology

Assumptions of the model

(1) Missing markets:

- Capital market (loanable funds) and international capital flows (interest rates, foreign exchange).
- Stock market (stock prices, equity).
- Labor market (wages, unemployment and aggregate demand).
- Liquidity market (money market).

Comments on the methodology

Assumptions of the model

(2) Missing market risk exposures:

- mid and long-term interest rates (level, structure and volatility)
- foreign exchange (level and volatility).
- stock prices (level and volatility).
- wages (level, employment, labor income).
- short-term interest rates (level, volatility).

Comments on the methodology

Assumptions of the model

(3) Alternative view to endogenous default (credit risk)

- Non-linear valuation linkages between sectors of the economy.
- Default: risk of sector assets in relation to sector liabilities.
- Uncertainty: on balance sheets produces risk, and risk affects value.
- Value of liabilities is derived from assets, and there are contingent claims on those uncertain assets.

Comments on the methodology

Assumptions of the model

(4) Bank's moral hazard.

- Too-big-to-fail ?
- Large v/s small banks risk aversion ?

Conclusions

Relevant approach to analyze default in small commodity-exporting open economy.

Policy implications? Increase capital adequacy for small banks? Expand government guarantees on loans to firms? Expand supervision to large borrowers?

Missing markets and market risks analysis.

Missing contingent marked-to-market balance sheet interlinks and risk transfers between sectors.