POLICIES FOR MACROFINANCIAL STABILITY: HOW TO DEAL WITH CREDIT BOOMS?
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Discussion – Nicolas COEURDACIER (SciencesPo & CEPR)

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Three crucial questions

• Q1 --- What triggers credit booms?

• Q2 --- When do credit booms end up in busts, and when do they not?

• Q3 --- What is the role of different policies in curbing credit growth and/or mitigating the associated risks?

Very ambitious paper ... perhaps ‘too’ ambitious.
What does the paper do?

Build a dataset of credit booms (good & bad) across 170 countries over the period 1970-2010.

1. Identify credit booms (good and bad) --- 176 booms episodes

2. Investigate countries’ characteristics in period of booms versus ‘tranquil times’
   - Univariate and Multivariate analysis
   - Cross-country regressions

3. Investigate the role of policies in limiting the occurrence of credit booms
   - Standard Stabilization Policies: Monetary and Fiscal
   - Macroprudential Policies
Roadmap of discussion

Do the authors answer to the ‘three’ crucial questions?

- Q1 --- What triggers credit booms?
  - Not exactly.
- Q2 --- When do credit booms end up in busts, and when do they not?
  - Yes but...
- Q3 --- What is the role of different policies in curbing credit growth and/or mitigating the associated risks?
  - Not really.

But they do have a lot of interesting results!
Q1 --- What triggers credit booms?

“Robust explanatory” variables

• Faster (past) output growth.

• Financial deepening.

• Less flexible exchange rate regime.

• But not ‘capital flows surge’.
Q1 --- When do credit booms occur?

*Reformulate* the question into a less ambitious one ---- causality?

- Faster (past) output growth
- Financial deepening
- Less flexible exchange rate regime
- But not in periods of ‘capital flows surge’.
Q1 --- Can we predict credit booms episodes?

Also a less ambitious question but more policy relevant.

• Which observable variables help to predict credit booms? How much ahead?

• Might require the use annual data --- fixed-effect panel.

• Perform out-of sample forecasts.

• If somehow yes, can we also predict the ‘bad’ credit booms?
Q1 --- When do credit booms occur?

- **Missing variables?** --- Empirical literature on financial crisis.

- Other potential important macro variables from the literature, potentially useful for ‘bad’ booms.
  - Financial Liberalization (+) and capital inflows (+) --- in the paper.
  - Real exchange rate appreciation or terms-of-trade (+).
  - Level of reserves (-).
  - Long-term *real* interest rates (-)
  - ...

See among others: Kaminsky and Reinhardt (1999), Gourinchas and Obstfeld (2012)...

- Quickly runs into multicollinearity issue in multivariate analysis.
## Q1 --- When do credit booms occur?

### Missing variables, (low) number of observations and multicollinearity

<table>
<thead>
<tr>
<th>DV: Dummy=1 if Credit Boom</th>
<th>DV: Dummy=1 if House Price boom and Credit Boom</th>
<th>DV: Dummy=1 if Household Credit Boom</th>
<th>DV: Dummy=1 if Firm Credit Boom</th>
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<td>(1)</td>
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<td>OLS</td>
<td>Probit</td>
<td>OLS</td>
<td>OLS</td>
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<td>GDP per capita</td>
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<td>Pseudo R-squared</td>
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Table 5. Regression Analysis: Incidence of Credit Booms, 1970-2010
Q1 --- When do credit booms occur?

- Less flexible exchange rate regime --- why?
  - Loss of monetary policy autonomy.
  - Inconsistent monetary (and fiscal) policy. Foreign currency reserves?
  - Exchange Rate Speculation --- Currency attacks versus Carry-Trade.

- Capital flows surge --- which capital flows?
  - Short-term versus Long-term.
  - Bank credit, Portfolio Flows versus FDI. Carry-Trade flows?
Q2 --- When do credit booms end up in busts?

- Answer to Q2: ‘Bad’ credit booms tend to be larger and last longer.

What about the explanatory variables used to answer Q2?

- Output growth, financial deepening, exchange rate regimes...

- Explanatory variables...
  - ... for ‘bad’ versus ‘good’ booms.
  - ... for ‘bad’ booms versus ‘tranquil times’.
Q3 --- What is the role of different policies in curbing credit growth?

• Most ambitious and policy relevant question.

• Answer --- ‘Monetary and fiscal policies do not appear to be effective in limiting booms[...]. Macroprudential tools, by contrast, have at times proven effective […].’

• A depressing answer for policy makers?

• Can we answer the question given policy endogeneity? --- most likely not.
Q3 --- What is the role of different policies in curbing credit growth?

Expected direction of the bias due to policy endogeneity

– If policy makers react to credit booms by tightening monetary and fiscal policy --- might expect a *positive* sign on both monetary and fiscal stance.

– Positive sign and significant for fiscal policy but negative and not significant for monetary policy.

– Possible interpretations?

1. Monetary authorities react to credit booms and are effective in limiting their occurrence.
2. Monetary authorities do not react to booms and are not very effective.
3. Some countries react to credit booms and are effective in doing so and some do not.
Q3 --- What is the role of different policies in curbing credit growth?

• Can we deal better with policy endogeneity? --- Difficult.

• Monetary policy
  ✓ Impossible Trilemma as an identification strategy --- ‘Foreign’ monetary policy shocks.
  ✓ ‘Peg-stabilization’ or currency unions.

• Fiscal policy
  ✓ Gov’t expenditure shocks: wars & military expenditures, natural disasters, price of natural resources… Hopeless?
  ✓ Blanchard-Perotti identification of fiscal shocks --- for OECD or more parsimonious VAR.
Conclusion

• Very well written paper and very interesting description of credit booms across the globe.

• Perhaps ‘too’ ambitious questions.

• Need to deal somehow with endogeneity, in particular policy endogeneity --- or be even more cautious in your interpretation of the results.
Conclusion --- Three crucial questions

• Q1 --- When do credit booms occur?

• Q2 --- When do they end up in busts, and when do they not?

• Q3 --- What are the implications for policies?