Financial Crisis and Macroeconomic Policy

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Logística

Logística

- Introduccíon al curso
- Revisión del Syllabus
  - **Horario:** Martes y Jueves, 19:45 - 21:00
  - **Evaluación:**
    - **Ensayo cortos:** 1.000 palabras (para esta parte del curso), **6 de marzo**
    - **Trabajo final:** 10-15 páginas, **al finalizar el curso, fecha por definir**.
    - **Propuestas trabajo final:** 10 minutos, 5 slides, textbf11 y 13 de marzo. Opcional! confirmar interes hasta el 6 de marzo.
  - Clases: slides en ingles, discusión en español
  - Lecturas: disponibles en https://github.com/pcuba/POLECONUCB.
  - Contacto: pcubabor@umd.edu
- ¿Preguntas?

Introduction

Motivation

- Crises are dramatic events
- Share common elements across time and space
  - Loss of confidence on ability to repay financial obligations (governments, banks, private agents)
  - Exacerbated by fiscal and monetary policies
  - Expectations play a crucial role
- Depend on economic context: trade and financial integration, exchange rate regimes, policies and institutions.

Some examples

| Let's look at some examples	
Chile	1926, 1980,
Mexico	1929, 1981
Philippines	1981
Indonesia	1997
Greece	2007
Ukraine	2008
Iceland	2008
Italy	1866, 1921, 2008
Argentina	1890, 1931/1934, 1980/1985, 2001

Key elements to consider

- Capital flows
- Domestic credit
- Exchange rate and interest rate policies
- Balance sheet deterioration (banks, households, government)
- Financial frictions
- Interactions

Net Annual Private Flows to Emerging Markets
Percent of GDP (rolling average)
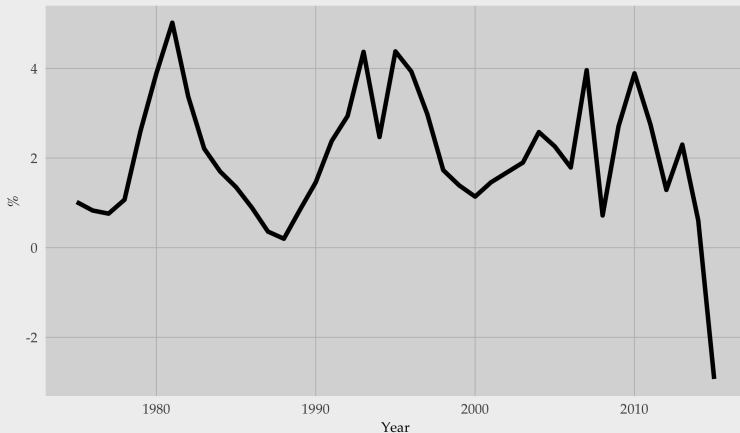
Source: IMF BoPS annual data. Net private flows include net FDI, portfolio, & other flows excl. IMF lending. Clark, John, Nathan Converse, Brahima Coulibaly, and Steve Kamin (2016). "Emerging Market Capital Flows and U.S. Monetary Policy", IFDP Notes. Washington: Board of Governors of the Federal Reserve System, October 18, 2016.

Anatomy of Crises

Credit Booms

1. Credit expansions are associated with boom-bust dynamics in:

   - Economic activity
   - Equity and housing prices
   - Real exchange rate (appreciation followed by a crash)
   - External deficits

2. Credit booms in AE and EE share similar characteristics.

3. Are synchronized internationally around major (global) events.

4. Not all credit booms end up in crisis, but are often followed by banking crisis, currency crisis and sudden stops.

Measuring Credit Booms

Follow methodology of Mendoza and Terrones (2012):
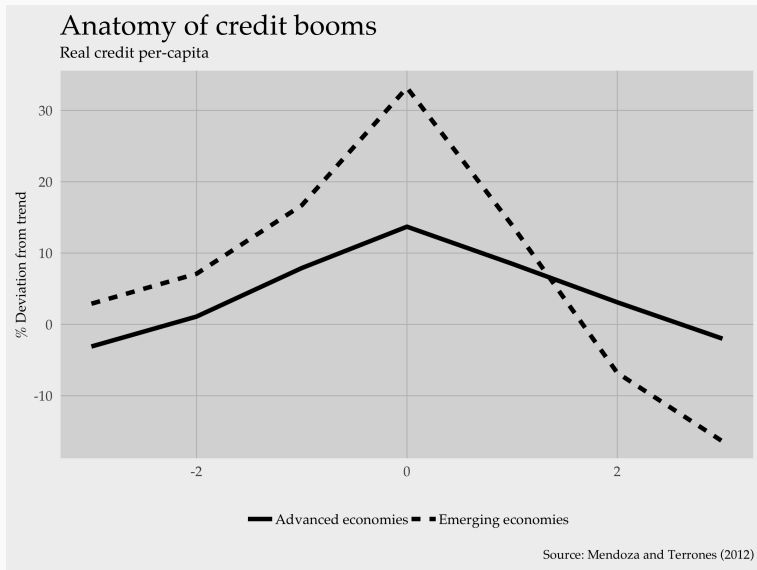
- Define country-i is in a credit boom if:

$$l_{i,t} \geq \phi\sigma(l_i)$$

  ϕ: threshold factor (e.g. 1, 1.5, 2,...)
  $l_{i,t}$: deviation of $\log(credit/per-capita)$ relative to trend
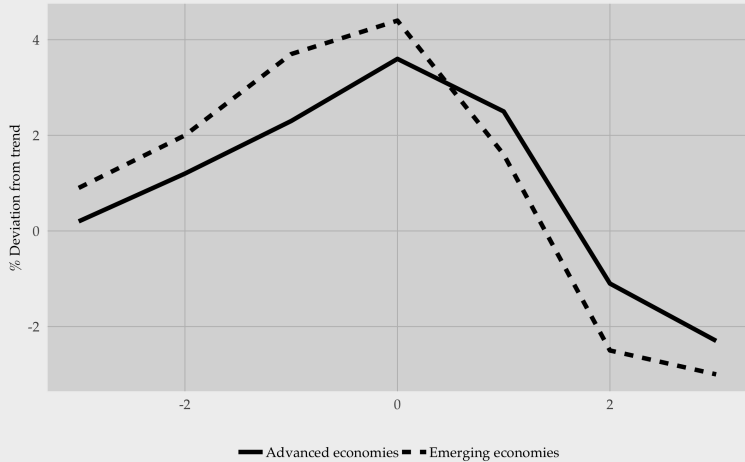 (e.g. HP filter)
  $\sigma(l_i)$: standard deviation of $l_{i,t}$

- Set $\phi = 1.65$ because $Pr(l_{i,t}/\sigma(l_i) \geq 1.65) = 0.05$
- Consider 5% of tail events of credit-growth distribution

Anatomy of credit booms
Real credit per-capita

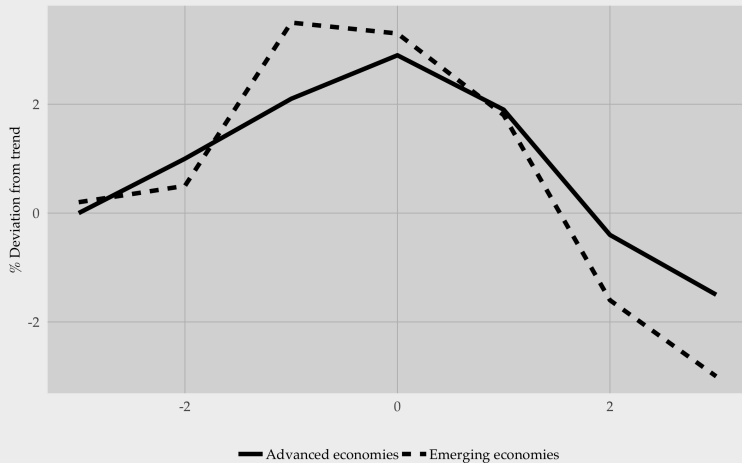Source: Mendoza and Terrones (2012)

Economic activity
Real GDP around credit booms
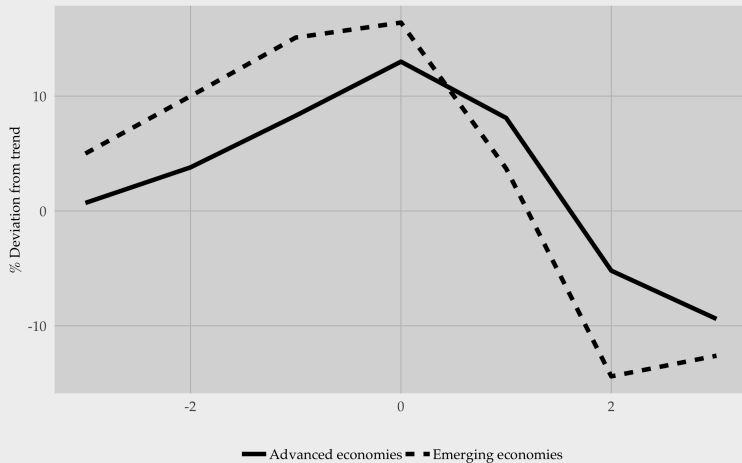
Source: Mendoza and Terrones (2012)

Domestic Demand (C)
Private consumption around credit booms

Source: Mendoza and Terrones (2012)

Domestic Demand (I)
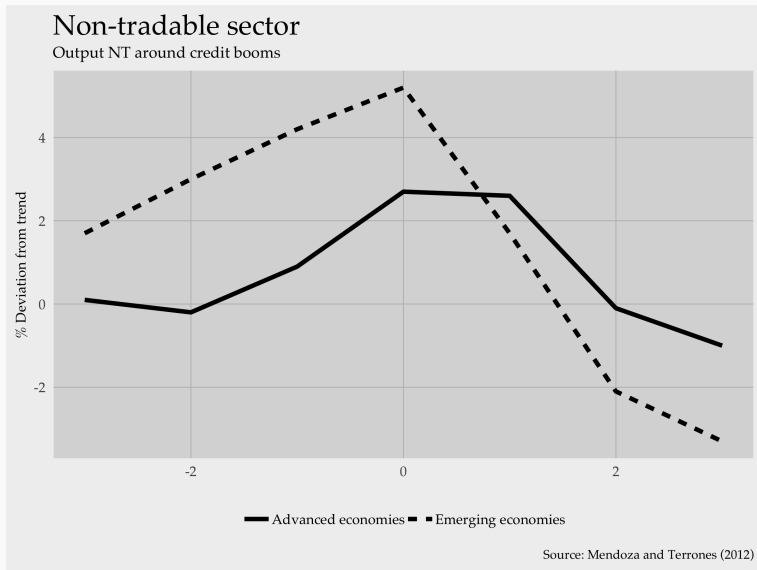Investment around credit booms

Source: Mendoza and Terrones (2012)

Domestic Demand (G)
Government consumption around credit booms

Source: Mendoza and Terrones (2012)
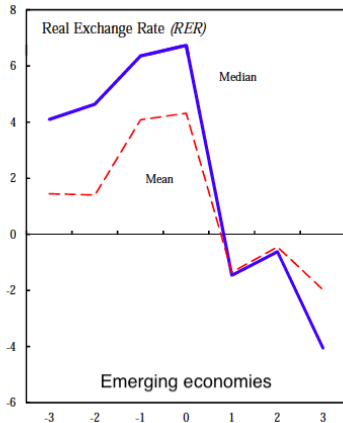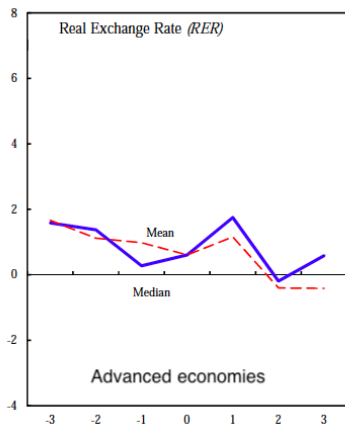
Non-tradable sector
Output NT around credit booms

Source: Mendoza and Terrones (2012)

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Event study
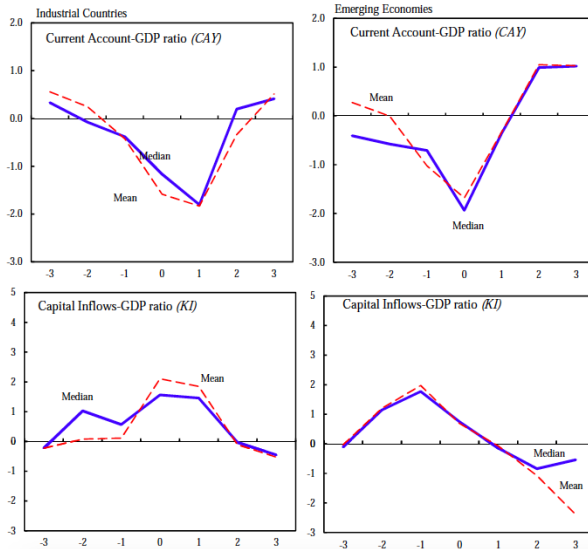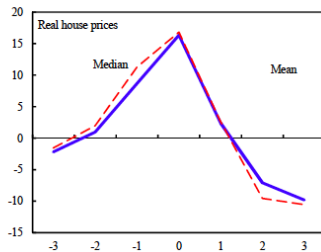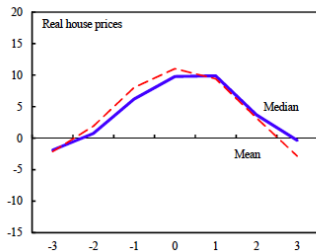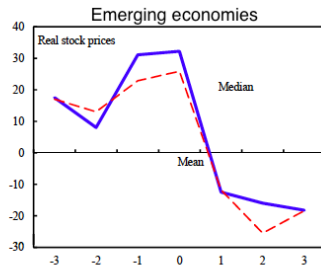

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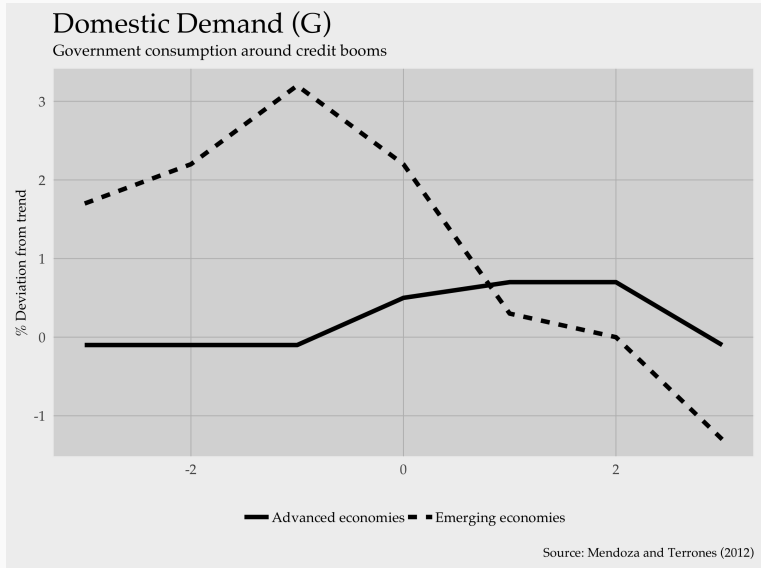
Figure 7. Credit Booms: Current Account, Capital Inflows and Money
(Cross-country means and medians of cyclical component)

- Question: What happens with real money balances?

Advanced economies · Emerging economies
Real stock prices · Real house prices
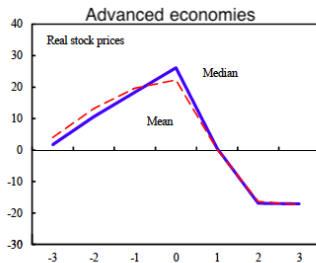
- Question: What about aggregate inflation? Why?

Summary

- Credit booms across AE and EE associated with boom-bust dynamics.

- Output, expenditures, stock prices, housing prices, and the real exchange rate move above trend during the build-up phase.

- Drop below trend in the bust-phase, the current account falls first and then rises.

- No major changes in inflation.

- EMs display: larger fluctuations, procyclical fiscal policy, sudden stop features (sharp swings in CAY, P-NT, Y-NT).

Next: Association of credit booms and financial crisis? Potential drivers of credit booms?

Credit booms and financial crises

	Banking Crisis	Currency Crisis	Sudden Stops
All countries	0.44	0.54	0.24
AE countries	0.36	0.44	0.14
EE countries	0.51	0.63	0.34

- Not all credit booms end in financial crises but 1 out fo 4 do
- Financial crises tend to be at its highest after credit booms peak (both in AE and EM)
- Consistent with Schularick and Taylor (2012) credit growth is a predictor of banking crisis
- macro fluctuations in the countries that experienced crisis are larger and display more abrupt declines than those of the non-crisis countries
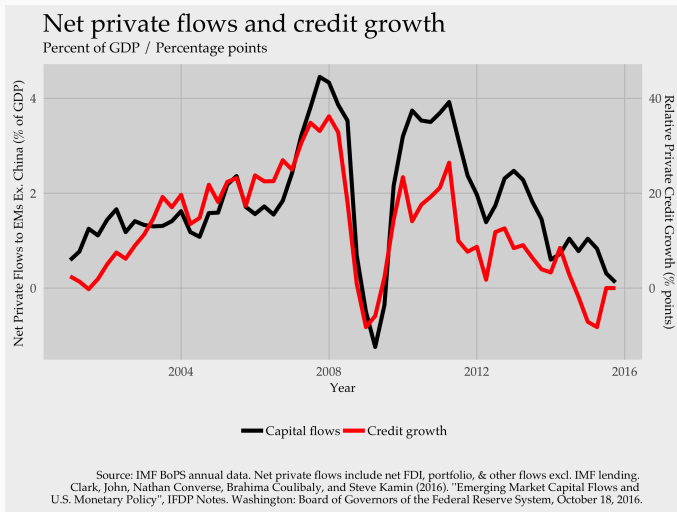
What drives credit booms?

Table 6. Credit Booms: Potential Triggering Factors[1].
(Frequency distribution)

	Industrial Countries	Emerging Market Economies	All
Large Capital Inflows (A) [2]	0.33	0.47	0.36
Significant Productivity Gains (B) [3]	0.42	0.20	0.18
Large Financial Sector Changes (C) [4]	0.22	0.30	0.27
Memo items:			
(A) & (B)	0.17	0.10	0.07
(A) & (C)	0.06	0.15	0.09
(B) & (C)	0.17	0.04	0.04

- Surges in capital inflows tend to precede credit booms in both AE and EE
- TFP growth and financial reform lead to credit booms in AE, but less so in EE

More evidence

- Take away: credit and capital flows tightly linked

Net private flows and credit growth
Percent of GDP / Percentage points

Source: IMF BoPS annual data. Net private flows include net FDI, portfolio, & other flows excl. IMF lending.
Clark, John, Nathan Converse, Brahima Coulibaly, and Steve Kamin (2016). "Emerging Market Capital Flows and
U.S. Monetary Policy", IFDP Notes. Washington: Board of Governors of the Federal Reserve System, October 18, 2016.

Additional results

- $\sim 70\%$ of credit booms occur in countries with managed or fixed exchange rate regimes (AE and EE)
- Once credit grows above 1σ above trend, probability of a credit boom is 17%. AE 23% and EM 13%