The Impact of Industrialized Countries’ Monetary Policy on Emerging Economies

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Current Policy Challenges Facing Emerging Economies
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Overview

How changes in developed economies’ interest rates affect emerging economies?

- Important and timely question for emerging economies!

Textbook effect: Lower interest rates should increase growth in EMs (Neumeyer and Perri 2005, Uribe and Yue 2006)

Following 2008, low world interest rates (+ capital inflows) but lackluster growth...

Why didn’t low interest rates induce higher growth in emerging economies?

⇒ This paper proposes a model consistent with these empirical observations
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Sketch of the Model

- Small Open Economy: World interest rates taken as given

- Two types of agents: Entrepreneurs and households
  - Entrepreneurs:
    - Risk averse and face idiosyncratic risk
    - Savers
    - Hire labor to produce before observing idiosyncratic productivity
    - Risk-aversion + risky labor: Labor and production depend positively on wealth
    - Domestic and foreign assets, imperfect substitutes

- Households:
  - Linear utility, no idiosyncratic risk
  - Borrowers
  - Supply labor and invest in non-reproducible asset, in fixed supply (i.e., Housing)
  - Can default and renegotiate their debt (sunspot shock)

- Extension: Endogenous growth
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Key Mechanism

In response to lower foreign interest rates...

- Households: Higher borrowing in unproductive activities (i.e. housing)
- Entrepreneurs: ↓ savings and wealth ⇒ ↓ production
- Multiplier effect: ↓ production ⇒ ↓ savings and wealth

- Default introduces financial fragility
  ▶ Higher leverage → higher losses in case of default (wealth redistribution)
  ▶ Lower foreign wealth → Default: larger impact on output

- Model replicates empirical observations: Lower rates and higher inflows, but lower output
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A Decrease in Interest Rates

Figure 7: Response to low interest rates in Industrialized Countries, 2005-2017.
My comments

What forces drive poor growth performance in emerging markets in this period?

1. What is the role of China and the price of commodities?
2. What is the relevant borrowing cost in emerging economies?
3. What would have happened *without* fall in world interest rates?
The role of China...

- China's GDP increased from 5% of world GDP in the 1990s to 18% by 2017.
- GDP growth in China decelerated steadily since 2007.
- Might China's slowdown have caused slow growth in emerging markets (EMs)?

![GDP growth graph](chart.png)
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GDP growth in China decelerating steadily since 2007
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...and the Price of Commodities

- Commodity prices increased almost 3 times from 2002 to 2008, decrease since 2011.
- Growth in emerging economies correlates with commodity prices.
  - Mechanism: China slowdown → ↓ price of commodities → ↓ growth in EMs.
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- Growth in emerging economies correlate with commodity prices
- Mechanism? China slowdown $\rightarrow$ ↓ price of commodities $\rightarrow$ ↓ growth in EMs
What is the role of China and the price of commodities?

World interest rates might not be only drivers of growth over this period...

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• World interest rates might have also impacted China and commodities but...
  - Other long-run drivers of China’s growth slowdown
  - SOE assumption might not be such a good idea for China
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- Control for other forces in the data to isolate role of world interest rates
  - Exploit cross-country heterogeneity to identify impact of interest rates in countries differentially exposed to commodity price fluctuations or financially integrated.
What is the Relevant Borrowing Cost in Emerging Economies?

Emerging Markets International Borrowing Costs

- Long-term yields show more gradual secular decline, stop declining in 2011
- EMBI spreads fell from 1998 to 2006, increased slightly thereafter
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What if Monetary Policy had been Different?

Model incorporates only negative effect of interest rates: \( \downarrow i \Rightarrow \downarrow GDP \)

\( \Rightarrow \) Economy would be better off without this policy.

What if there was no counter-cyclical monetary policy in developed economies?

Let's look at Great Depression...
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Figure 6. GDP Growth in Latin America
1920–45
(Selected countries, annual percentage change)

Summing Up

Stylized yet rich model to investigate effects of world interest rate changes

• Introduces role for wealth, wealth distribution, and risk on production
  ▶ Lower interest rates reduce entrepreneurs’ savings and increase HHs’ borrowing
  ▶ Households borrowing induces housing boom
  ▶ Entrepreneurs reduce financial wealth, hire and produce less

• Alternative mechanism on super relevant topic:
  ▶ Wealth and risk matter
  ▶ Where financial inflows go matters

• A few comments on how the model is taken to the data:
  ▶ (Try to) Remove effect of other shocks in the data
  ▶ Reproduce dynamics of Emerging Markets’ international borrowing costs
  ▶ Incorporate positive effect of interest rates to quantify trade-off
  ▶ More evidence on the mechanism?