

Monetary policy for commodity booms and busts

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Question:

How should monetary policy respond to movements in commodity prices?

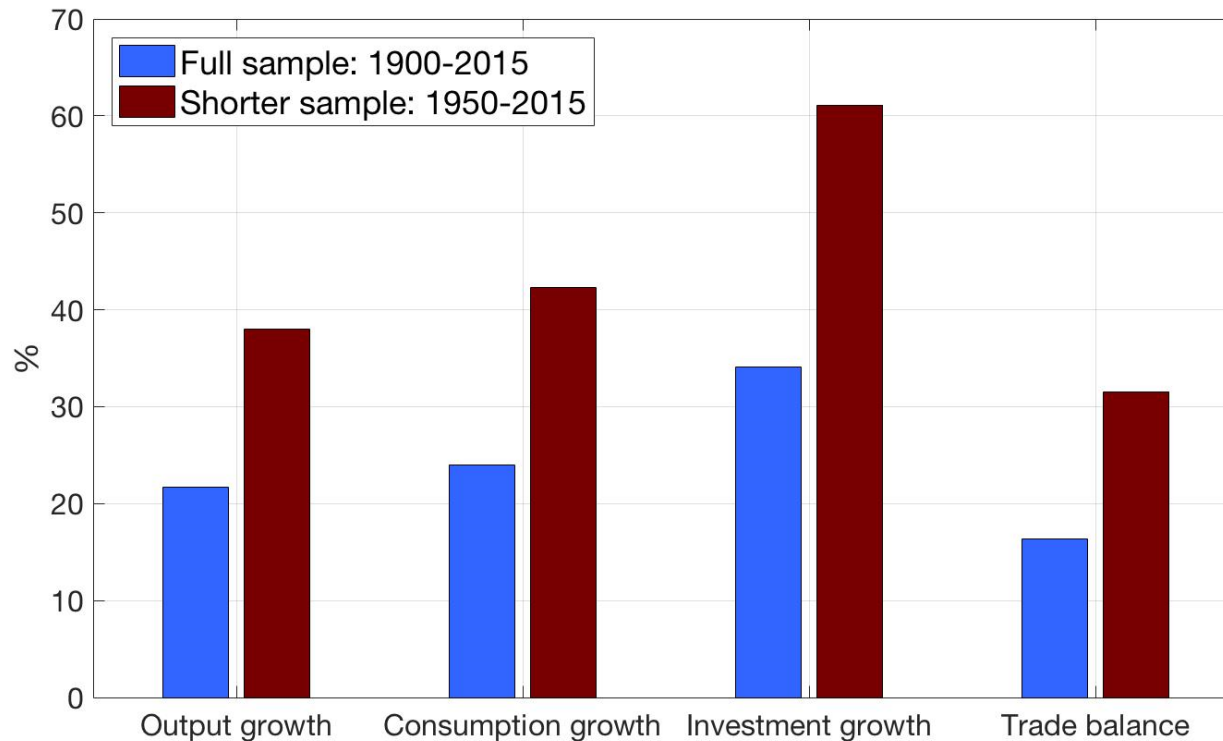
Motivation

1. Volatility in commodity exporters increasingly driven by the global commodity cycle.
2. Strong link between **global** commodity prices and **domestic** financial conditions.
3. Commodity prices increasingly moving together, and alongside other assets:
 - Discussion around commodity 'financialization'.

Motivation 1/3:

Volatility in commodity exporters increasingly driven by the global commodity cycle

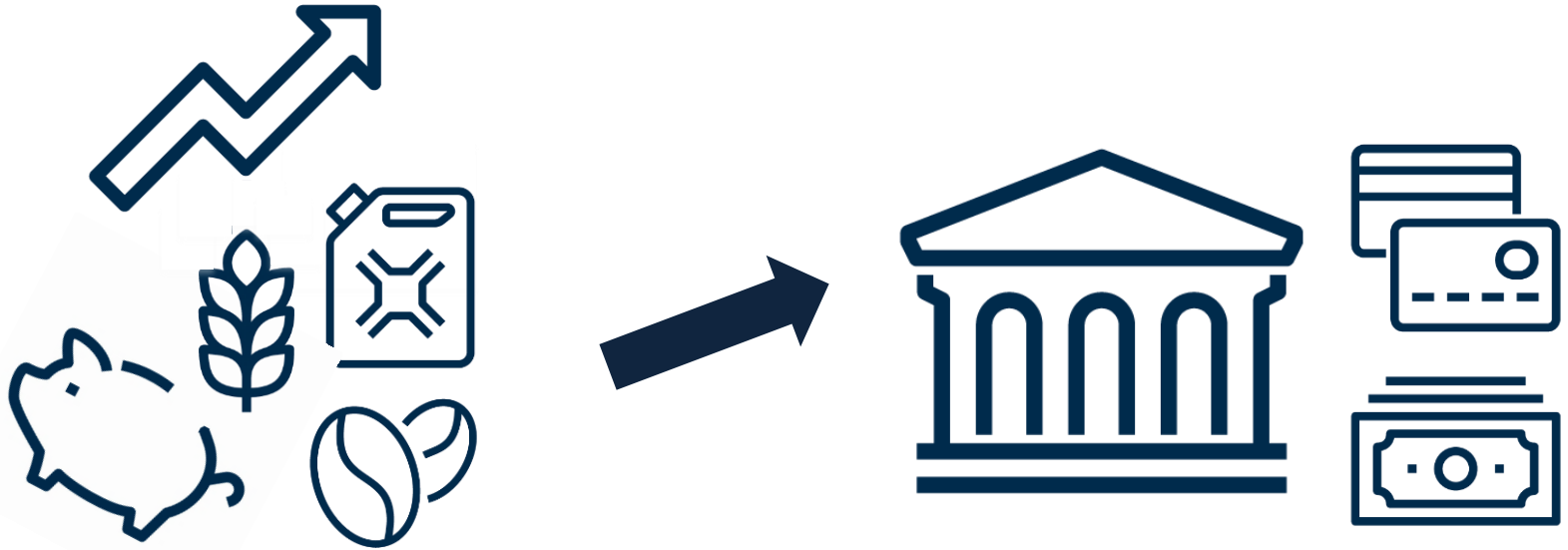
- Stronger effects of commodity price shocks in more recent data samples.
- *Increasing* importance in both in structural models and SVARs.



Notes: Contribution of commodity price shocks to observable macroeconomic variables in Argentina according to estimated structural model in Drechsel and Tenreyro (2018)

Motivation 2/3:

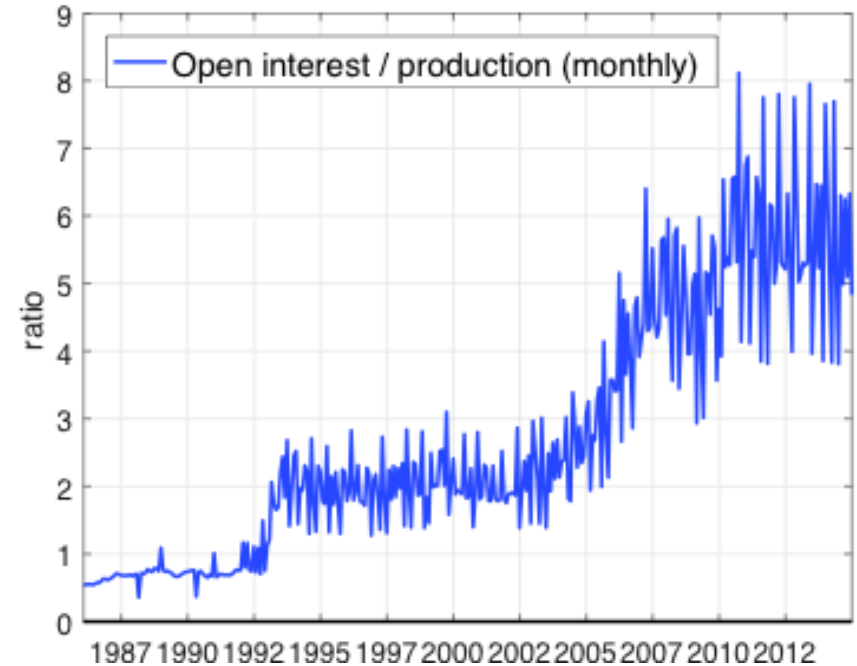
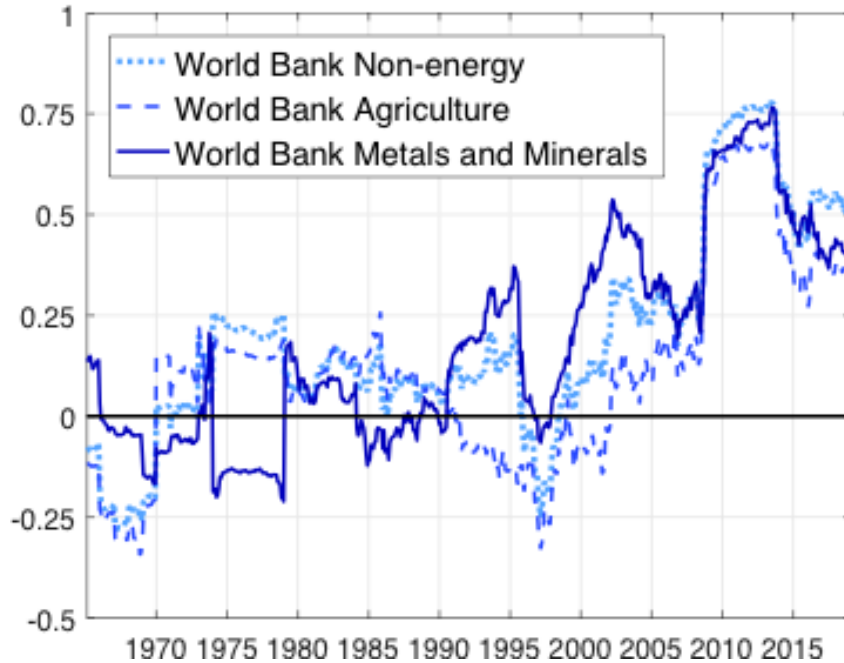
Strong link between global commodity prices and domestic financial conditions



- Bastourre et al. (2012)
- Shousha (2016)
- Fernández et al. (2018)
- Drechsel and Tenreyro (2018)

Motivation 3/3:

Discussion around commodity 'financialization'



Notes: Left panel shows the correlations of the World Bank Energy Index with analogous indices for other commodity types. Right panel shows open interest in commodity futures from the CFTC relative to commodity production.

- 1) Correlation between prices of different commodities ↑
- 2) Correlation between commodity prices and other asset prices ↑
- 3) Transactions in commodity futures relative to commodity production ↑

Framework

Standard open economy model to study monetary policy.

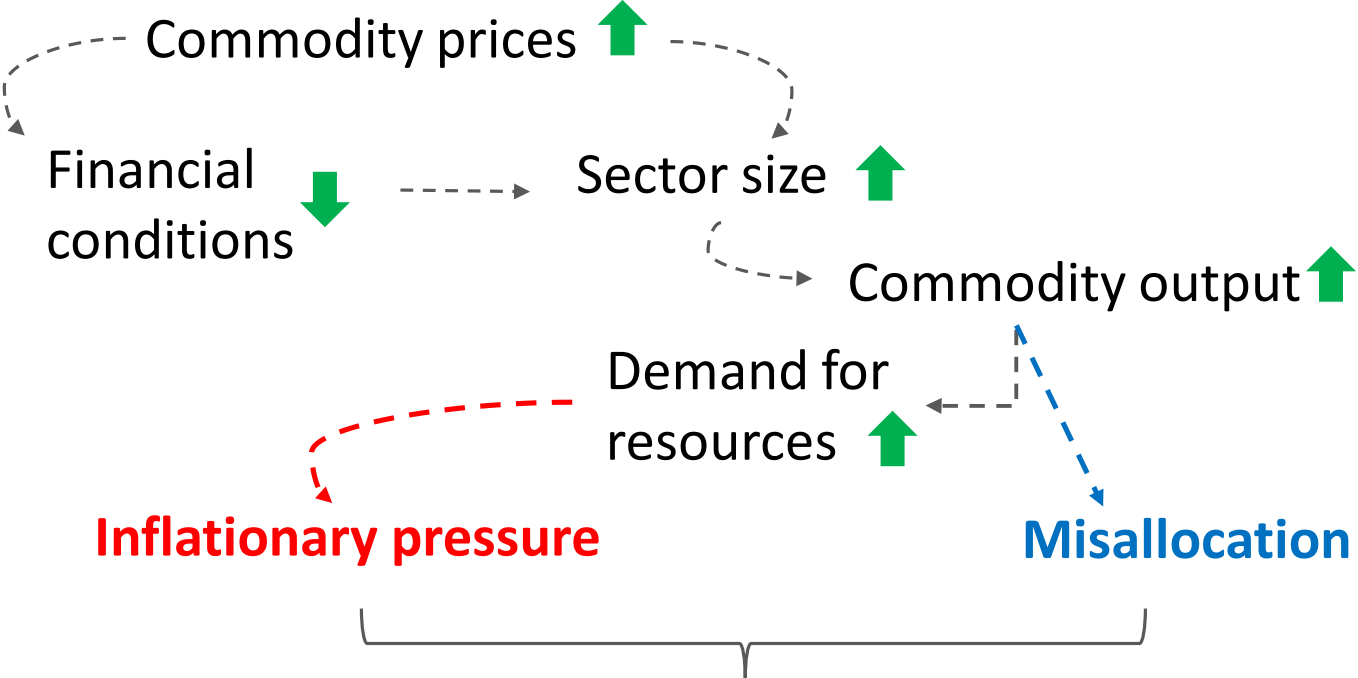
Two twists:

1. Two sectors:

- a) commodity sector, takes world prices as given;
- b) standard NK for all else

2. Commodity prices → financial conditions

Main results – rise in commodity prices



Optimal policy: Raise interest rates, let currency appreciate

– Financial channel amplifies – requiring tighter policy

Alternative policies:

- Taylor rules – also tighten, similar performance
- Exchange rate peg – more volatile inflation and output

Caveats

- Model results include no active role for **fiscal policy**.
 - Can interpret as part of the cycle that fiscal fails to offset.
- Active **exchange-rate intervention** common in emerging economies (Carstens, 2019).
 - Model has no currency mismatch/balance sheet channel.
- Possible role for **macroprudential policies**?

Welfare results and key challenge

- Welfare differences between different policies are relatively small.
- For some emerging commodity exporters, first order task for monetary policy is to tackle recurrent periods of high and persistent inflation.
- Causes of high and persistent inflation:
 - Insufficient policy credibility
 - Intrinsic inflation inertia (e.g. wage indexation)

Lessons from Latin American disinflation experiences

- Exchange-rate pegs a double-edged sword.
 - Short-cut to stabilise inflation.
 - Major risks if currency becomes overvalued.
- Fiscal discipline necessary but not sufficient.
 - Potential role for heterodox policies to reduce inflation inertia, but also risks.
 - Ideal solution would build consensus in wage negotiations.

Conclusion

- Business cycles in commodity exporters increasingly driven by global commodity cycle, amplified by financial conditions.
- Our model suggests monetary policy should lean against the inefficient booms caused by commodity price rises, allowing the exchange rate to appreciate.
- But in some emerging economies, the primary challenge is to reduce initial high levels of inflation. Much more research needed.