THE MONETARY AND FISCAL HISTORY OF VENEZUELA: 1960-2005

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Discussion by

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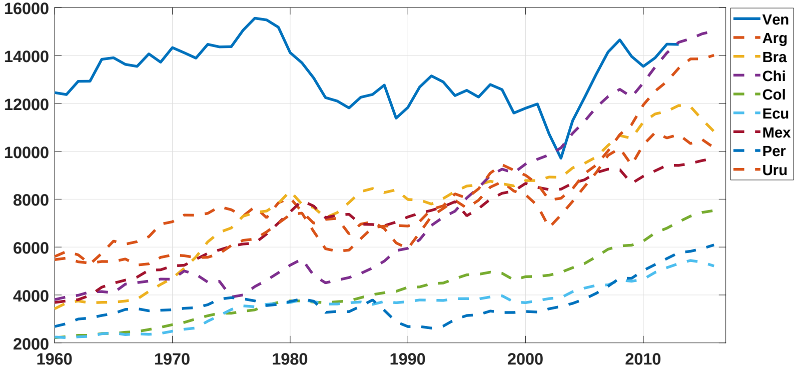
INTRODUCTION

- Important project, sets some basic facts our models should confront
- Main result from Diego's accounting analysis
  - Sizable increase in "transfers" post 1975
  - Initially financed with debt (1975-1986), subsequently with seigniorage
- This discussion
  1. Fiscal and monetary outcomes correlated with movements in oil prices
  2. Sketch of a model to think about this correlation
  3. Raise some questions along the way

Basic facts about Venezuela

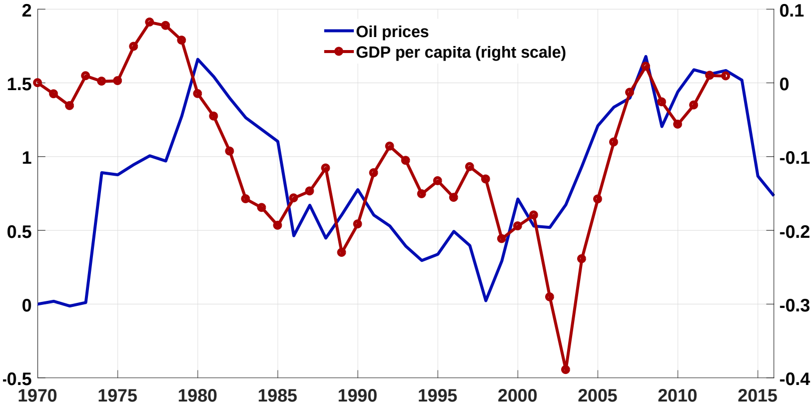
- Fifth largest economy in Latin America
- Largely dependent on oil
  - Revenues from oil exports $\approx$ 95% of exports and 30% of GDP (2007 data)
  - Proven oil reserves reached those of Saudi Arabia in 2009
- Several crises over the past 50 years
  - Government defaults (1982, 2017)
  - Exchange rate realignments and inflation (1988-1989, 1996, 2015-)
- Progressive reduction in living standards

GDP PER CAPITA (CONSTANT 2010 US $)



- Venezuela had the highest GDP per capita in the region
- Progressive decline in 1980s-1990s, rebound in 2000s
- Income per capita drops further 30% post 2013

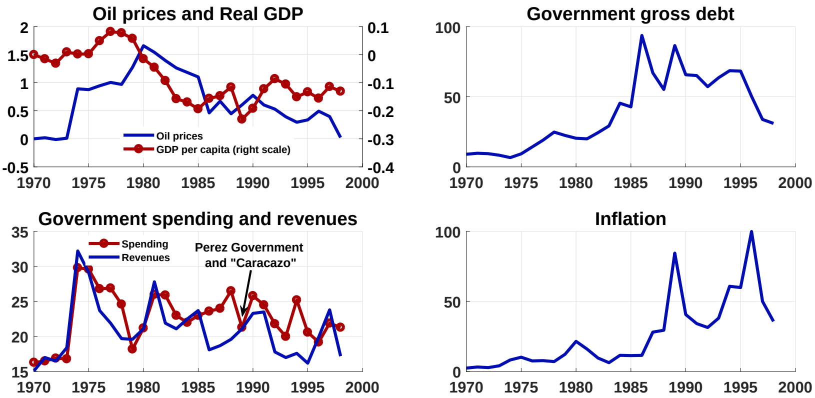
GDP per capita and Oil prices



Positive association between gdp per capita and oil prices. Two cycles

- Boom in the 1970s, bust in the 1980s-1990s
- Boom in the 2000s, bust post 2013

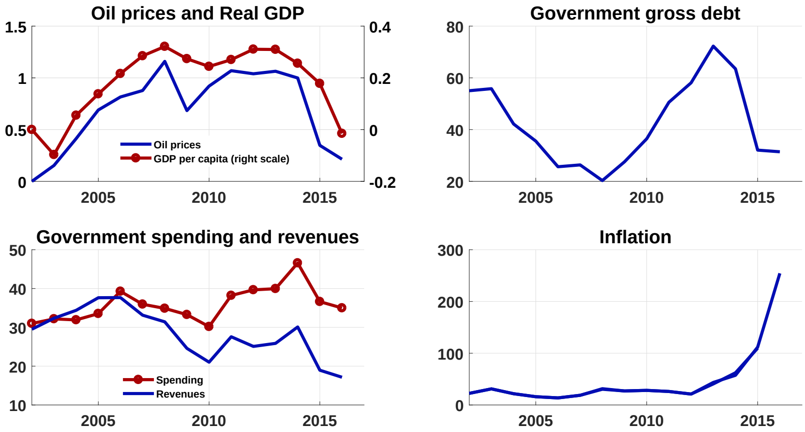
Monetary and Fiscal outcomes around 1st cycle



Spending grows during boom. Hard to adjust it in the bust

- Sustained government's deficit and increase in debt
- Eventually an increase in inflation

Monetary and Fiscal outcomes around 2^{nd} cycle



Similar pattern: Spending grows during boom. No adjustment in the bust

- Sustained government's deficit and increase in debt
- Eventually an increase in inflation

My reading

- Government spending grows during economic booms
- When economy tanks (because of oil price shocks), government has hard time cutting spending
- This puts pressure on debt and/or inflation to finance the government budget constraint

Next: Sketch of a model to rationalize this pattern

Environment

- Time is discrete, $t = 0, 1, \ldots, T$
- Real economy (peg with zero inflation abroad)
- Households:
  - Endowment, Y_t (random walk). Taxed at rate τ
  - Preferences over consumption and a public good, $U(C_t, G_t)$
  - No savings
- Government:
  - Pays for G_t by collecting taxes and borrowing from abroad at price q_t
  - Hard to cut public spending, $G_t \geq G_{t-1}$
  - Borrowing limit, $B_{t+1} \leq \bar{B}$

PROBLEM OF THE GOVERNMENT

What happens if $G_{t-1} > \tau Y_t + (q_t \bar{B} - B_t)$?

- Something needs to adjust for the budget constraint to hold
- For simplicity I assume that τ adjusts

$$V_t(G_{t-1}, B_{t+1}, Y_t) = \max_{G_t, B_{t+1}} \left\{ U(C_t, G_t) + \beta \mathbb{E}_t \left[V_{t+1}(G_t, B_{t+1}, Y_{t+1}) \right] \right\}$$

$$G_t \leq \tau Y_t + (q_t B_{t+1} - B_t)$$

$$G_{t-1} \leq G_t$$

$$B_{t+1} \geq \bar{B}$$

$$C_t = (1 - \tau) Y_t$$

Problem of the government

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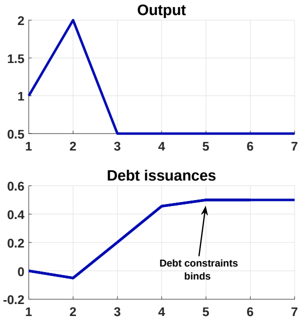
Public finances in a boom-bust cycle

- Gov't increases G_t after positive income shocks
- If subsequent shock negative, Gov't sets $G_{t+1} = G_t$. New borrowing

$$B_{t+2} = \frac{G_t - \tau Y_{t+1} + B_t}{q_t}$$

- If income stays low, debt keeps accumulating, up to the limit



The Elephant in the Room

- Here I assumed that τ adjusts when borrowing limit binds, and this guarantees that the government's budget constraint holds

- More generally, governments have different options

  - Increase τ
  - Leave the peg and finance the budget constraint with seigniorage
  - Reduce spending promises
  - Defaults on foreigners

- A big question is why governments chose one option over another

Conclusion

- In the case of Venezuela, movements in oil prices appears important to understand fiscal and monetary outcomes
- One interpretation: promises made during booms hard to revert in bad times. Poses a burden on fiscal and monetary policy in bad times
- A big question is why Venezuelan governments choose to resolve "defaults" in the way we observed