THE MONETARY AND FISCAL HISTORY OF VENEZUELA: 1960-2005

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Discussion by
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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 ≈ 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

- Progressive reduction in living standards
- 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
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 2nd CYCLE**

**Oil prices and Real GDP**

**Government gross debt**

**Government spending and revenues**

**Inflation**

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

- Sustained government’s deficit and increase in debt
- Eventually an increase in inflation
• 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 $\tau$
  - 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 $\tau$ 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
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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
Here I assumed that $\tau$ adjusts when borrowing limit binds, and this guarantees that the government’s budget constraint holds.

More generally, governments have different options:

- Increase $\tau$
- 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.