Stabilizing Role of Fiscal Policy

Roberto Rigobon
MIT

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What are the tools for stabilization?

• Which ones are the typical responses?
  – Monetary Policy
    • Interest rates and money supply
    • Reserve requirements
  – Exchange rate policy
    • Interventions
    • Capital controls

• What is never answered?
  – Fiscal Policy
Response to capital inflows?

- Indeed, fiscal policy is perhaps the best tool to deal with capital inflows
  - Monetary policy creates a reinforcing loop
  - Capital controls creates other inefficiencies.
  - Fiscal policy creates a balancing loop and reduces the distortions.
But fiscal policy is almost never stabilizing…

- In general, fiscal policy is pro-cyclical and therefore it is rarely stabilizing. It is destabilizing.
  - Revenues are volatile
  - Savings are difficult
What is the revenue problem?

• Fiscal revenues are extremely volatile in several emerging markets
  – Different sources of risk:
    • Commodity prices (exports)
      – This is perhaps the most important source of risk in Latin America and Africa.
    • Recessions
      – Political, financial, and social crises are an important source of fiscal risk.
    • Natural Disasters
      – El Niño, Hurricanes, Earthquakes, etc.
What are the implications?

• Procyclicality of fiscal policy
  – Cost?
    • Excessive cycles
    • Excessive volatility of the real exchange rate
  – Why?
    • Lack of insurance
    • Underdeveloped financial sector
    • Political economy
What are the Implications?

- Exchange rate volatility and pro-cyclical fiscal policy put pressure on
  - Monetary policy
  - Banking sector
  - Investment (if irreversible)
  - High interest rates (if risk aversion)
  - Inefficient specialization
Costs to the Economy

- High real exchange rate volatility is associated with lower investment and growth, weaker banking sector, inefficient specialization, and dolarized economy.
- Pro-cyclical fiscal policy is associated with lower growth, higher frequency of exchange rate crises, higher real interest rates, and less efficient tax systems.
What can be done?

• Classical view
  – Insure the risk.
    • Transfer the risk to foreigners
    • Future markets
    • Contingent debt
    • Stabilization Fund
What can be done?

• Insure the risk.
  – Transfer the risk to foreigners
    • What to do?
      – Sell the risky sector:
        » Commodity producing sector.

• How it works?
  – Sell the sector to foreigners and then they bear the risk
  – The country consumes the annuity of the privatized proceeds

• Problems:
  – Who will purchase natural disaster risk?
  – Credibility and privatization price.
What can be done?

- Insure the risk.
  - Future markets
    - What to do?
      - Stabilize price fluctuations in future markets

- How it works?
  - The country agrees on a price for exports in the future.
  - If the spot price is above the agreed price, the country experiences a loss in the financial asset. The opposite if the spot price is below.
  - Notice that the returns on the financial instrument are negatively correlated with the spot price change.

- Problems:
  - Volumes cannot be stabilized
  - Future markets are sometimes illiquid
  - Futures for long run horizons are extremely illiquid
What can be done?

• Insure the risk.
  – Contingent Debt
    • What to do?
      – Interest rates indexed to commodity prices or natural disasters

• How it works?
  – The interest rate is indexed to the risk.
  – A negative shock implies a reduction in interest payments. The opposite if there is a positive shock.
  – Notice that the interest rate payments are negatively correlated with the risk source.

• Problems:
  – Partial insurance at best.
  – Very costly – the country has to have enough debt.
  – Market does not seem to like this instruments
What can be done?

- Insure the risk.
  - Stabilization Fund
    - What to do?
      - Self-insurance: Save in good times and withdraw in bad times.

- How it works?
  - Use savings to stabilize resources in bad times. The opposite in good times.
  - The returns on the savings should be negatively correlated with the risk factor

- Problems:
  - Partial insurance at best.
  - Very costly – the country has to save.
  - Important problems of design.
What happens in practice?

- Risky sectors are rarely sold
- Future markets are extremely limited.
  - Specially in commodity markets.
  - Good and liquid in the short run, but not in the long run
- Contingent debt
  - Experiences have been very negative
  - Even in cases of hurricanes where moral hazard does not exist
- Most countries end up implementing a Stabilization Fund.
Stabilization Funds

• What is the experience in the world?
  – Horrible
  – Really Horrible

  – Appropriability:
    • Most stabilization laws are changed frequently.
      – Specially when the resources saved are too large
      – Defeating their stabilization purpose.

  – Governability:
    • Most stabilization funds are associated to one risk source instead of overall fund.
    • This includes:
      – The asymmetric debt financing
      – The saving versus expenditure rule

  – Stochastic process:
    • This determines the expenditure rule. Hence, the proper estimation is crucial.
Stabilization Funds

• Appropriability
  – When the resources are too large, the political temptation to change the law and withdraw more resources is too big.

• Governability
  – Stabilization funds should stabilize government revenues, and not the flows of each source of risk

• Stochastic Process
  – Estimation of the stochastic process is rarely part of the design. Most stabilization funds just use moving averages as rules and become saving rules instead of expenditure rules.
Appropriability

• What can be done?
  – Invest resources better
    • Most funds invest resources in US Treasury Bonds. Why?
    • Wouldn’t be better to invest in assets that are negatively correlated with the source of risk?
  – Cap on funds
    • Recognize that there is a political economy problem and limit the resources accumulated ex-ante
      – Implies that full stabilization is impossible
      – Have discussion on how the non-saved funds are going to be spent.
Governability

• What can be done?
  – Have one stabilization fund for all fiscal revenues, independently of all the sources of risk.
  – Delegate key parameters in the expenditure rule to an independent institution.
    • The “discussion” process is more important than the rule itself.
    • Chilean case
Lessons

• Fiscal risk can be very damaging to investment and growth.
  – 
  – Pro-cyclicality of fiscal policy.
  – Real exchange rate volatility.

• Most stabilization responses are not available.
  – Therefore, stabilization funds are the preferred policy.

• Most stabilization funds have been incorrectly designed
  – Appropriability.
  – Governability.
  – Stochastic process.

• Key insights about design
  – Better investment policies.
  – Cap on the funds.
  – One fund for aggregate fiscal revenues.
  – Independent fiscal council to determine key variables in the rule (buy in)