Stabilizing Role of Fiscal Policy

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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

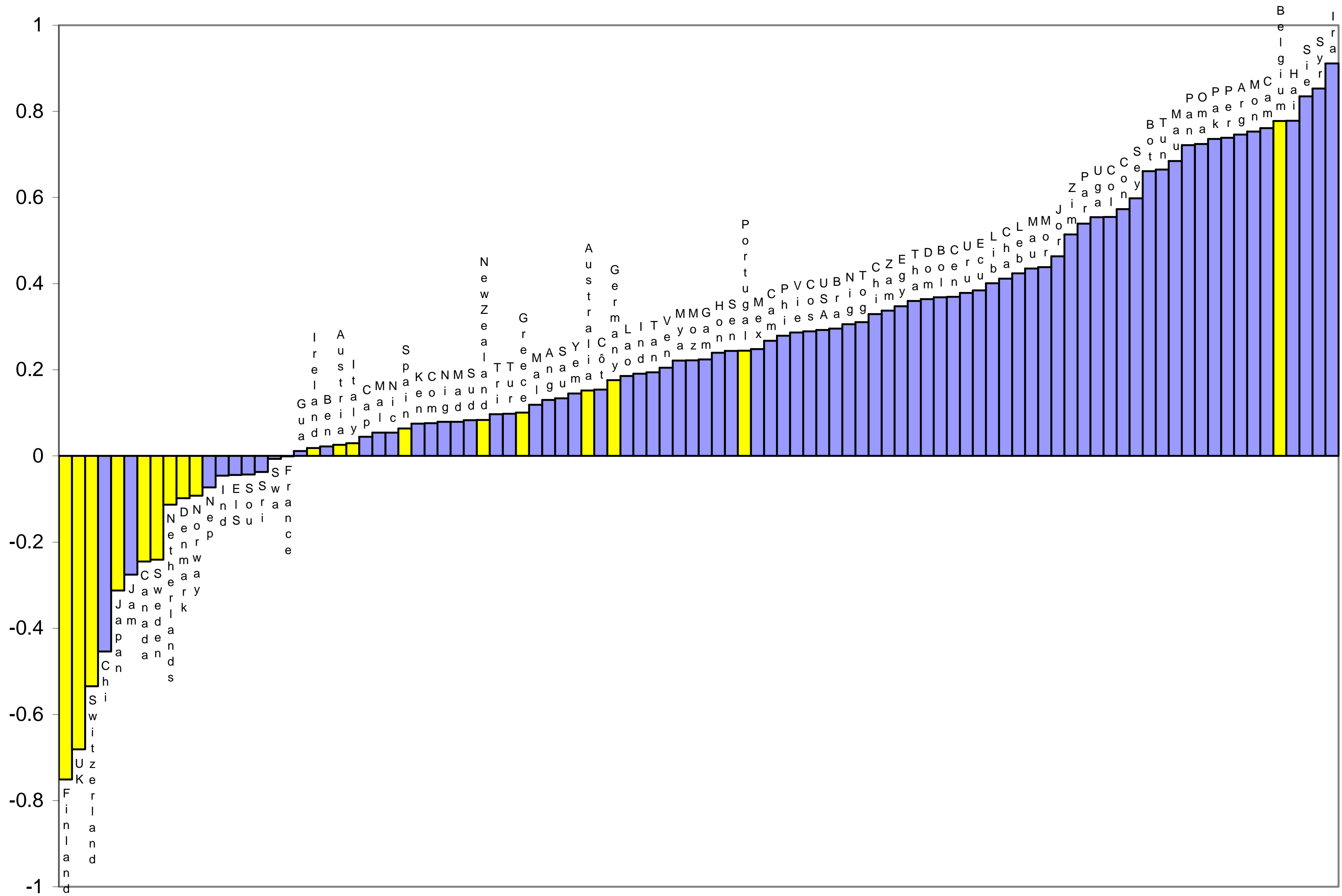
What is the revenue problem?

- 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.

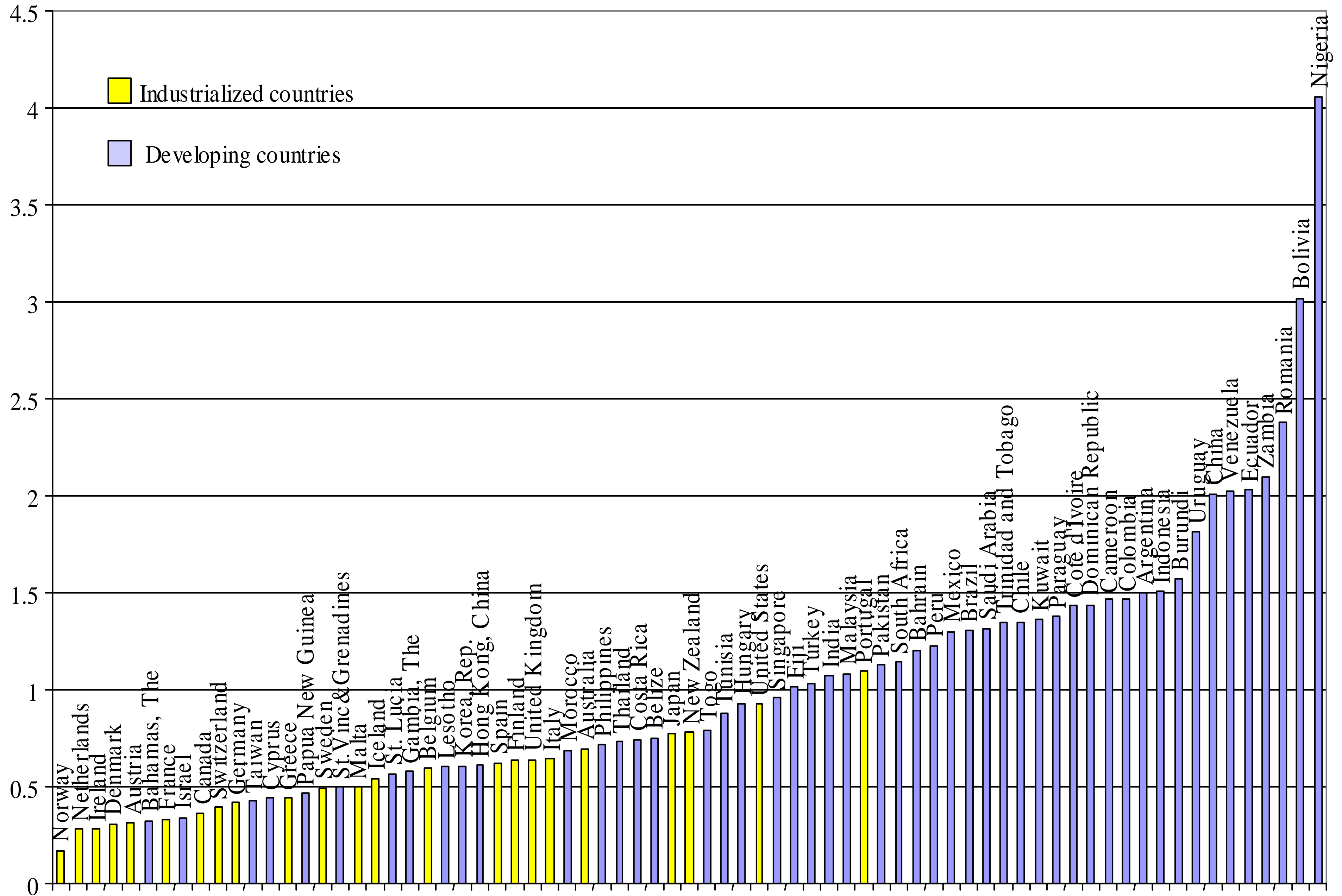
What are the implications?

- Procyclicality of fiscal policy
  - Cost?
    - Excessive cycles
    - Excessive volatility of the real exchange rate
  - Why?
    - Lack of insurance
    - Underdeveloped financial sector
    - Political economy

Procyclical Fiscal Policy



Volatility of the long run real exchange rate



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 desgined
  - 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)