Fiscal Policy, Volatility and Growth

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Macroeconomic Policy and Growth

• Do macroeconomic policies matter for growth?

Policy-makers: Yes

(Some) Academics: No evidence

– Policies are persistent, growth is not
– No significance of policy in growth regressions
– Any correlation between good policies and high growth is due to a key omitted variable: quality of institutions
Some quotes

“Once we take the effect of institutions on volatility into account, there seems to be little major role for standard macroeconomic variables emphasized by the literature and by the Washington consensus…. Overall we interpret our findings as suggesting that the major causes of large cross-country differences in volatility are institutional, and none of the standard macroeconomic variables appear to be the primary mediating channels through which institutional causes lead to economic instability.” – Acemoglu, Johnson, Robinson and Thaicharoen - Journal of Monetary Economics 2003

“This insignificance of policy variables once institutions are accounted for raises the suspicion that adverse macroeconomic policies (and macroeconomic volatility in general) may have been proxying for poor institutions in growth regressions.” Easterly, 2005 (p.1055)
Why “Institutions” might not be the only answer

• Without denying their importance, some disagree with the statement that institutional reform is the only way for countries to develop
  “The economic success of East Asia in the post war era, and of China most recently, has been a consequence of good-for-growth dictators, not of institutions constraining them.” Glaeser, La Porta, Lopez-de-Silanes, Shleifer (2004)
• There is the risk that by focusing on difficult institutional reforms we end up with inaction and little progress
• In addition, “first-best institutions” are difficult to define, design and implement. We need to understand the channels through which poor institutions affect growth, rather than seeing them as a black box (Rodrik, 2008)
A second chance for Macroeconomic Policy

- In the literature there has been an emphasis on measures of economic policy based on levels ("distortions"). For example: government size, inflation and exchange rate overvaluation.
- These measures of economic policy have been proven to be insignificant in growth regressions after controlling for institutions (Easterly, 2005 and Acemoglu et al., 2003).
- Are there any other measures of macroeconomic policy that might matter?
Volatility instead of levels (distortions)

• What about policy volatility?
  “An increase variability of actual or anticipated inflation may raise the natural rate of unemployment in two rather different ways” (Friedman, 1977)

• Macroeconomic volatility has many times been documented as a problem for developing countries (exchange rate, terms of trade, monetary and fiscal policy)

• While it remains a debate, the cost of volatility on the economy (in terms of growth and welfare) could be high
Fiscal Policy Volatility

• Why fiscal policy volatility?

  – Empirical relevance, renewed interest on the effects of fiscal policy
  – It might matter more in the future given the current difficulties in implementing sustainable fiscal policies
  – There is an ongoing debate on what are the optimal institutions for fiscal policy (certainly in Europe), much more than in monetary policy where there is consensus (on institutions, maybe not on policies)
Fiscal Policy: What can go wrong?

• High deficits and debt: sustainability
• Procyclicality (cyclical stance not appropriate given economic conditions)
• Discrete changes in fiscal policy (volatility)
  – Endogenous
  – Exogenous

• Unsustainable fiscal policy can lead to the need of future (discretionary) changes in fiscal policy so it is also linked to volatility
Measuring Discretionary Policy

- Focus only on exogenous changes in government consumption.
- Measure volatility of residuals of regressions of the type:

$$\log(G)_{i,t} = \alpha_i + \beta_i \Delta \log(y_{i,t}) + \gamma_i \log(G)_{i,t-1} + \delta_i W_{i,t} + \varepsilon_{i,t}$$

- $\sigma^\varepsilon_i$ - policy volatility (standard deviation of the residual)
Focus on Discretionary Fiscal Policy

- Changes in fiscal policy that are not related to the business cycle
- Could be linked to politically-motivated changes or realizations that previous budgetary plans were not sustainable
- Endogeneity is a problem: use of instruments
Fiscal Policy Volatility and Business Cycles

From Fatás and Mihov (2003)
Discretionary Fiscal Policy

• Economic effects are large:

  *If Portugal brings down its policy volatility (3.9%) to that of Spain (2.6%), which is a 33% reduction in the standard deviation of the residual volatility, then it will see its output volatility go down by 26% from 2.65% to slightly less than 2%*

• Endogeneity is (always) an issue but the use of instrumental variables based on institutional characteristics support the robustness of the results

• Constraints are good: governments that face a larger number of veto points in the budget process induce less macroeconomic volatility
List of Institutional Variables

• **Political constraints on the executive** (checks and balances) measured as a simple sum of the potential veto points:

  \[ \text{Constraints} = \text{Legislature} + \text{Upper chamber} + \text{Judiciary} + \text{Federal} \]

• **Electoral system:** Majoritarian vs. Proportional

• **Political system:** Presidential vs. Parliamentary

• **Number of elections**
Volatility and Welfare

Output volatility and consumption volatility

Source: WDI - World Bank.

From Loayza, Ranciere, Servén and Ventura (2007)
Discretionary Fiscal Policy and Growth

• Does the fiscal-policy-induced volatility in output have a negative effect on growth? Yes, growth is lower in the presence of volatile fiscal policy.

• Endogeneity is (again) an issue but the use of instruments shows that the results are robust: governments that face constraints in the budget process, generate less volatility and higher growth.

• The effect is also present within countries (across different decades).

• The effect is much larger for poor countries than for rich countries, consistent with others’ results (Aghion et al., 2006).
Fiscal Policy Volatility and Growth

From Fatás and Mihov (2007)
Exchange Rate Volatility and Growth

From Aghion, Bachetta, Ranciere and Rogoff (2006)
Policies or Institutions?

• Fiscal policy is the result of institutions, but is there an independent effect? The Acemoglu et al. (2003) test:

\[ \text{Growth}_i = \alpha + \lambda \text{Policies}_i + \beta' \text{Institutions}_i + \gamma' \mathbf{Z}_i + u_i \]

• Is \( \lambda \) significant? No if you measure policies as distortions (inflation, government size) but yes if you include fiscal policy volatility as a measure of economic policy.

• An alternative test: within a certain institutional level, do macroeconomic policies affect growth? Yes.
Conclusions (I)

- While institutions matter, macroeconomic policy is at least a *mediating channel* for the effect of institutions and can possibly be an independent factor itself (i.e. we cannot identify and measure institutions that are responsible for all differences in policy)
- The effects are present when looking at both output volatility and growth
- The effects are larger for developing countries which is also true when looking at the effects of exchange rate volatility on growth
Conclusions (2)

• Getting macroeconomic policy right can bring benefits even without institutional reforms

• Understanding the channels through which institutions affect economic outcomes can help us produce recommendations for institutional reform that will improve macroeconomic performance. In the case of fiscal policy, constraints, checks and balances lead to better macroeconomic outcomes