Discussion of: Policy Mix in a Small Open Emerging Economy with Commodity Prices
by: Marine André, Alberto Armijo, Sebastián Medina and Jamel Sandoval

Carlos Urrutia
ITAM, Department of Economics

XXV Meeting of the Central Bank Researchers Network

October, 2020
A semi-structural Model for Mexico

Key features

- Government collects income from oil exports
  - Oil price (exogenous) and exchange rate (endogenous) affect fiscal stance

- Public debt have both domestic and foreign components
  - The shares of domestic and foreign debt are (somewhat) exogenous
  - The cost of servicing debt includes a risk-premium, depending on the primary balance
  - The risk-premium affects the exchange rate through an UIP condition

- Augmented IS and Phillips curves
  - Affected by exchange rate (both) and risk-premium (the IS)

- Standard Taylor rule for monetary policy

- Fiscal rule for the central government

- Each equation has its own shock (plenty of them)
Relation between Fiscal and Monetary Policy

An increase in government expenditures
- Increases debt and the risk premium
- Depreciates the exchange rate
- Increases output gap and inflation
- Leads to a contractionary monetary response

An increase in the nominal interest rates
- Appreciates the exchange rate
- Reduces output gap and inflation
- Lower tax collection and increases government borrowing costs
- Forces the government to cut spending to satisfy fiscal rule on debt
Other shocks (oil, risk premium) require a coordinated response by fiscal and monetary authorities.

For instance, an increase in the risk premium:
- Increases the cost of servicing debt and the government deficit
- At the same time, depreciates the exchange rate and rises inflation

The response requires a combination of contractionary fiscal and monetary policies.

... but the precise combination has implications for welfare.

The model provides incentives to smooth the use of both instruments.
The model provides a lot of useful insights about fiscal and monetary policy coordination.

While the intuition behind the impulse responses and welfare results seems right:

- It is hard to know how they depend on parameter values.
- Specially, since a calibration or estimation of the model is not presented.

The quantitative role of each different channel could be further explored:

- Eliminating, for instance, the risk premium channel and recomputing the impulse responses.

The COVID scenario has an implicit identification strategy:

- Only risk premium, oil price and output gap shocks affect each of these three variables.
- This strategy should be made explicit and probably defended.