Macroeconomic Framework and Fiscal Policy

Sanjeev Gupta,

Fiscal Affairs Department

IMF
The Financial Programming Framework
Seeks consistency of policy objectives:
- Real GDP growth, inflation, external viability, availability of foreign exchange and credit

Financial programming:
- Undertaken to correct imbalances: domestic and external. Reflected in excess aggregate demand, inflation, BOP disequilibrium
- Expansionary fiscal policies are typically behind these imbalances. It’s Mainly Fiscal (IMF).
Credit creation to finance budget deficit causes a BoP disequilibrium

- Financial programming allows estimation of the economy’s resource envelope

- **Dynamic considerations:**
  - The fiscal envelope over time
Forecasting or Targeting key variables

- **Real output:**
  - Econometric modelling (production functions), trends in major macroeconomic aggregates

- **Inflation:**
  - Price management, exchange rate, import prices, inertia

- **BoP:**
  - Imports, exports, private capital flows, foreign grants and loans
Financial Programming: The Sectoral Components
The basic idea

- Equilibria in the money market (money supply and demand) and in the balance of payments determines total credit in the economy.
- Total demand for credit is split between the government and the private sector.
- Iterative process for consistency with targets for inflation, exchange rate/foreign reserves, and GDP growth, and their speed.
The Monetary Sector

- The money supply:
  - Domestic credit (D) + foreign reserves (F)

\[ \Delta M^s = \Delta D + e\Delta F \]
The Monetary Sector

The money demand (difficult to measure)

- A shortcut is needed: nominal national income \((PY)\) divided by velocity \((V)\)

\[
M^d = \frac{PY}{V}
\]

\[
\Delta M^d = \frac{\Delta(PY)}{V}
\]
Putting the sectors together

Equilibrium in the money market:

\[ \Delta M^s = \Delta M^d \]

With some algebra:

\[ \Delta D = \frac{\Delta (PY)}{V} - E \Delta F^* \]
Arriving at the fiscal envelope

The budget:

- The budget balance \((G - T)\) is financed by transfers from abroad \((TR)\), bank credit \((D)\), nonbank credit \((B)\), and foreign borrowing \((K)\)

\[
(G - T) - eTR_g = \Delta D_g + \Delta B_g + e\Delta K_g
\]
Arriving at the fiscal envelope

The budget:

- Note that the sale of public sector assets and the accumulation of arrears are ignored.

Alternatively:

\[
(G - T) = (S^P - I^P) + (M - X)
\]

Deficit = Private sector’s saving gap + External account deficit
The private sector

Total credit must be split:

\[ \Delta D_g = \Delta D** - \Delta D_p \]
Key messages

- Recognition of a tradeoff between credit to the economy and to the government
  - Fiscal profligacy crowds out private sector development

- Determination of the size of government consistent with monetary discipline and external constraints
  - Scope of government?
The fiscal envelope over time

- The dynamic budget constraint
  
  \[ G - T = \Delta S - rS \]

- Stability of debt: \( \Delta S = 0 \)

- Primary balance needed to service the debt:
  
  \[ T - G = rS \]
Debt sustainability

- The debt over time:
  - Changes in the debt stock \( S \) depend on the primary balance \( p \), the real rate of interest \( r \), the rate of GDP growth \( g \), and changes in high-powered money \( H \)

\[
\Delta S = S(r - g) + p - \Delta H
\]

- If \( r = g \)  => \( \Delta S = p - \Delta H \)
- If \( r > g \)  => higher primary to stabilize debt to GDP ratio
Once the fiscal envelope is determined:

- Expenditure policy: composition of spending, efficiency and equity issues, scope for retrenchment
- Tax policy: efficiency and equity issues, scope for revenue mobilization
- Tax administration and expenditure management: role for improvement