Debt Dynamic Model

Model Summary Document (MSD)

1. Model Purpose and Description

Fitch's proprietary Debt Dynamics Model (DDM) is usually employed to assist the rating committee in judging the sustainability of a given debt level and current fiscal policy settings. The DDM output is a projection for government debt/GDP, typically across a five-year horizon.

Several alternative projections for government debt/GDP are produced when running the DDM, based on alternative sets of input assumptions. This provides sensitivity analysis of the output with respect to shocks (such as fiscal slippage, increase in the cost of borrowing, economic recession or currency depreciation) in the input variables, relative to the baseline assumptions.

2. Model Assumptions

Where applicable, the assumptions in the model are described in Fitch's criteria

- Sovereign Rating Criteria

3. Model Inputs

The key model input variables are:

- General government debt (% of GDP) for the previous year (i.e. the most recent year before the projection horizon).
- Projections by year for each year in the projection horizon:
  - Government primary budget balance (% GDP);
  - Nominal effective interest rate (interest payments as % of general government debt as at the end the previous year);
  - GDP deflator (%);
  - Real GDP growth (%);
  - The exchange rate of the local currency of the country under review versus USD; &
  - Stock-flow adjustments (in millions of local currency units).
  - Additionally, where applicable: the stock of concessional debt and the nominal effective interest on this.

4. Model Development Data

This rating model does not directly use historical data for its development and calibration, and it only uses issuer specific data and other related data as described in the relevant criteria and/or RAC.

5. Model Limitations

Limitations include, but are not limited to, the following: The model is intended only to analyse sovereign issuers and assist the rating committee in judging the debt sustainability within Fitch's "Sovereign Rating Criteria".

6. Material Changes

The current model version is 1.3.x. Any future material changes will be disclosed in this section.

Contact Information

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