

Fitch Analytical Stress Test (FAST) Econometric Model

Model Summary Document (MSD)

1. Model Purpose and Description

The FAST Econometric Model incorporates a model in which inputs and outputs are formulated from a consistent set of decision rules, using national GDP as a key scenario input. The model scales the revenue effect of a cyclical decline for a given issuer (or specific revenue stream) based on the GDP scenario being considered. For issuers where the change in revenues has evidenced a strong correlation to changes in GDP, the use of GDP connotes a reaction in revenues to the general economic cycle. For those issuers where a strong correlation has not been evident, GDP is utilized as more of a pure scaling factor; for example, an assumption of a historically large GDP decline would result in the generation of “expected” issuer revenue performance that is weaker than the issuer has experienced historically.

More specifically, in response to a user-specified scenario for GDP (or another macro variable), the model generates both a point estimate and feasible range of percentage change in revenues.

The model utilizes a multipronged approach that incorporates both a basic econometric approach, when a significant correlation for that issuer is evident and an alternative interpolation methodology.

2. Model Assumptions

The assumptions in the model are described in Fitch’s criteria

- U.S. Public Finance State Governments and Territories Rating Criteria
- U.S. Public Power Rating Criteria

3. Model Inputs

Key model inputs include:

- Issuer revenue or usage time series
- Macro time series
- Inflation time series
- Scenario macro assumptions
- Scenario inflation assumptions

4. Model Development Data

Not applicable to this rating model as it does not 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 the RAC.

5. Model Limitations

The model is intended only to analyse U.S. state governments and territories within the scope of Fitch's "U.S. Public Finance State Governments and Territories Rating Criteria", and U.S. public power and gas utilities within the scope of Fitch's "U.S. Public Power Rating Criteria", and dedicated tax bonds within the scope of Fitch's "U.S. Public Finance Local Government Rating Criteria" and "U.S. Public Finance State Governments and Territories Rating Criteria".

6. Material Changes

The current model version is 3.1.x. Any future material changes will be disclosed in this section.

Contact Information

model_disclosure@fitchratings.com