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Sovereign Rating Regression Model

Model Summary Document (MSD)

1. Model Purpose and Description

The Sovereign Rating Regression Model (SRRM) applies multiple-regression Ordinary Least Squares (OLS) to a series of input variables in order to obtain linear regression parameters capturing the relationship of those variables with the Long-Term Foreign-Currency Issuer Default Rating (LT FC IDR). Those parameters (a set of coefficients and an intercept term) are then used in the associated Rating Model: Sovereign Rating Model (SRM).

The same model is used for all sovereigns.

The OLS regression is re-estimated and reviewed annually to incorporate additional data into the estimation period and to test for new potential variables, ensuring that the SRM evolves in line with Fitch's rating criteria.

2. Model Assumptions

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

- Sovereign Rating Criteria

3. Model Inputs

The calibration dataset consists of the year-end rating of all Fitch-rated sovereign issuers (the dependent variable) and historical data for the set of independent variables. The dataset spans the period from 2000 until the latest full year available, inclusive.

The independent variables span the four analytical pillars referenced in the Sovereign Rating Criteria: (1) structural features; (2) macroeconomic performance, policies and prospects; (3) public finances; & (4) external finances.

There is one variable for each of the concepts listed below. The model uses annual data for these variables. The data is mix of single year datapoints and three-year centred averages. The specific indicator derivation is described in the Sovereign Rating Criteria.

Pillar I – Structural features:

- Composite governance indicators
- GDP per capita
- Share in world GDP
- Years since default or restructuring event
- Money supply

Pillar II - Macroeconomic performance, policies and prospects**:**

- Real GDP growth volatility
- Consumer price inflation
- Real GDP growth

Pillar III - Public finances:

- Gross general government debt
- General government interest payments
- General government fiscal balance
- General government foreign-currency debt

Pillar IV - External finances:

- Reserve currency flexibility score
- Commodity dependence
- Official international reserves (for non-reserve-currency sovereigns only)
- Sovereign net foreign assets
- Current account balance plus net foreign direct investment
- External interest service

4. Model Development Data

See Model Inputs section above.

5. Model Limitations

Limitations include, but are not limited to, the following: The model is intended only to support the Sovereign Rating Model, which is intended only to analyse sovereign issuers within the scope of Fitch's "Sovereign Rating Criteria".

6. Material Changes

The current model version is 1.0.x. Any future material changes will be disclosed in this section.

Contact Information

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