July 01, 2025

Prism U.S. Non-Life Insurance Capital Model Model

Model Summary Document (MSD)

1. Model Purpose and Description

The Prism U.S. Non-Life Insurance Capital Model is a simulated projected cash flow runoff model based on insurer-specific data. The Prism Score represents the threshold in which Target Capital generated in a distribution through the simulation process exceeds Available Capital, which is reported as accounting surplus adjusted for several factors.

The main sources of Target Capital generation occur from underwriting losses incurred from new business, inadequate reserves, reinsurer defaults (or unwillingness to pay), U.S. natural catastrophe claims, poor asset total returns due to credit defaults, credit spread fluctuations, or price movements in equity or property investments and a static operational charge.

The model output is a Prism Score that is based on two key items, Target Capital and Available Capital. Prism is one of several factors in the development of a rating opinion.

2. Model Assumptions

The assumptions in the model are informed by the underlying criteria model

- Portfolio Asset Return Simulator,

and described in the Model Definition Document in Fitch's criteria

- Insurance Rating Criteria

3. Model Inputs

- Available Capital: Full balance sheet information
- Underwriting Risk: 10-year history of claims and premiums. Expenses by product are also available
- Natural Catastrophe Risk: Property insurance premiums by product and by state.
- Reserve Risk: Paid and incurred loss experience in total and by product.
- Reinsurance Risk: Full listing of all reinsurers with the amount recoverable and credit ratings.
- Investment Risk: Summary details of all assets including unrealized gain/loss positions and investment in affiliates.
- Asbestos and Environmental Risk: Data tables provide historical paid claims and reserves.

4. Model Development Data

See Model Summary Document for the associated Criteria Model: Portfolio Asset Return Simulator.

5. Model Limitations

The model is intended only to analyse U.S. non-life insurance issuers within the scope of Fitch's "Insurance Rating Criteria".

6. Material Changes

The current model version is 1.4.x. Any future material changes will be disclosed in this section.

Contact Information

model_disclosure@fitchratings.com