



PROPHET GI RESERVING LIBRARY

Setting and managing appropriate reserves

Overview

The Prophet GI Reserving Library is central to SunGard's Prophet GI risk modeling solution, and can feed directly into the Prophet GI Capital Modeling Library. The library contains the actuarial code required for creating and modifying reserving models, and is supported by an intuitive user interface. Data management is a key consideration, and the Reserving Library is supported by Prophet's powerful Data Conversion System.

As with all Prophet libraries, the code and its structure are intuitive. Actuaries can quickly build, modify and extend their models using Prophet's own simple code, without the need for additional coding languages or skills. And because of its transparency, managers can readily understand what drives certain model results.

Key Features

- **Focused design** – created by SunGard's in-house non-life modeling experts for an accurate representation of reserve levels and risks, covering both stochastic and deterministic reserving methods
- **Adaptability** – the code is transparent and can easily be extended and enhanced, allowing for fast model development
- **Data management** – the added-value of an efficient data input and cleansing process, using the Prophet Data Conversion System (DCS)
- **Compliance** – supports common global reserving requirements
- **Integration** – capable of interfacing with the Prophet GI Capital Modeling Library
- **Results interrogation** – allows for development factor investigation and selection. Results are accessed via a custom-built user interface

Ensuring that there are adequate reserves in place is a key concern for general/P&C insurers.

Solvency II and similar regulatory initiatives have driven insurers to build reserving models to manage reserve risks and monitor and control how reserve run-off differs from expected values.

Reserving Functionality

Supporting the various reserving methods are the following:

- A wide selection of techniques for creating and analyzing development factors and reserve run-off projection, along with common development factor examples
- Powerful statistical methods for fitted curve development
- Ability to reserve using both paid and incurred development triangles
- An intuitive graphical interface for the presentation of the reserves
- Standard Prophet databases
- Flexible data management and system integration
- Audit logs and control over user action
- Multiple versions of development factors for the same variable
- Blending of development factors
- Results selection across all methods and versions included by individual accident period or in total
- Annual, half-yearly, quarterly or monthly accident period and development period functionality
- Discounted projected cashflow results

Reserving Methods

The Prophet GI Reserving Library can apply the following reserving methods:

- Basic Chain Ladder
- Inflation Adjusted Chain Ladder
- Expected Loss Ratio
- Bornhuetter-Ferguson
- Benktander
- Average Cost Per Claim
- Cape Cod
- Berquist-Sherman
- Fisher Lange
- Payments per Claim Incurred
- Payments per Claim Finalized
- Projected Case Estimates
- Roll Forward
- Mack
- Mack with Tail
- Merz and Wuthrich
- Bootstrapping with process variance and bias
- Bespoke Calculations