



PROPHET LIFE LIABILITY LIBRARIES

Life product risk models

Overview

Prophet provides a fast, friendly and flexible solution for actuaries involved in life assurance, permanent health insurance and insured pension products. It manages the calculations and financial models used for:

- Embedded and appraisal valuations
- Cash flow and financial projections
- Net premium, gross premium and discounted cash flow valuations
- Realistic earnings valuations and reporting (including achieved profits, US GAAP and Margin on Services)
- Asset/liability modeling
- Dynamic solvency testing
- Stochastic projections
- Surplus and bonus strategy analyses
- Product pricing and design
- Analysis of surplus and movement in embedded values
- Current and projected contribution requirements for group pension schemes

Prophet makes it easy for you to extend your models to meet changing requirements in the future.

Key features

The following features are available in most libraries, although specific features may only be available in some.

General product features

- Regular or single premiums
- Level or increasing premiums
- Fixed or variable benefits
- Single life or joint lives

The main features provided by Prophet's Life Liability Libraries (except for the Financial Services Library) are set out in this product sheet. The other Library product sheets explain the additional specific features of that individual library.

Experience features

- Most common mortality tables, including AIDS
- Withdrawals, with any skewed incidence
- Spread maturity dates
- Optional paid-up policies
- Stochastic decrements
- Five components to build up overall investment return
- Allowance for tax on a number of bases

Valuation features

- Statutory reserves
- Market consistent valuations
- Projection of cash flows on multiple different bases simultaneously

Reassurance features

- Original terms (co-insurance)
- Risk premium (yearly renewable term)
- Financing

Goal seeking features

- Goal seeking to determine premium rates or unit allocation rates as appropriate to achieve a predefined level of profitability
- Goal seeking to determine self-supporting bonus / profit sharing rates for with profit products

Reporting Features

- Discounted profits, at three rates of discount
- Best estimate liability
- Discounted revenue accounts and accumulation of profits
- Calculation of profits in accordance with International
- Financial Reporting Standards including the proposed contractual services margin
- Breakeven month and internal rate of return
- Analysis of future surplus / margins

Dynamic Features

- Automatic output of the values which need to be passed from one dynamic loop to the next
- Any input assumption can be changed to make it calculate dynamically, by being read from a variable calculated in a higher level or ALM product in the previous dynamic loop

Benefits

The Liability Libraries allow customers to model the business at a very detailed level. Prophet's flexible open code architecture and tabular inputs enable all company-specific contract level data and formulas to be included. The comprehensive actuarial libraries are extensive and driven by selecting features, lending itself to very rapid implementation.

Most standard and regional features are provided out of the box and we provide a number of libraries for different liability types and also territories around the world. Most libraries also include goal seeking routines for pricing, different types of reinsurance and allow for stochastic projections.

When used in conjunction with the Asset Liability Strategy library, it can allow for complex management decisions and policyholder reactions and complete projection of balance sheets calculated on a market consistent basis. Additional modules can also be added to these libraries.

The results from the liability libraries can be used to provide market consistent embedded values (MCEV), economic capital, IFRS, local principles-based solvency modeling, as well as risk-based capital regulations, such as Solvency II and PBA.

The libraries support the use of Prophet's Nested Structures feature to embed one model within another.

About FIS' Prophet solution

The Prophet solution from FIS™ is a leading enterprise-wide actuarial modeling system that helps insurance and financial services companies meet reporting responsibilities, improve risk management, and develop more profitable products faster. Prophet uses customizable actuarial libraries for all major product types, including regional variations. It provides the transparency, performance and control required by today's actuaries and risk managers through integrated financial modeling and data management capabilities. Prophet is used by more than 9,000 users at over 730 customer sites in more than 65 countries.

About FIS

FIS is a global leader in financial services technology, with a focus on retail and institutional banking, payments, asset and wealth management, risk and compliance, consulting and outsourcing solutions. Through the depth and breadth of our solutions portfolio, global capabilities and domain expertise, FIS serves more than 20,000 clients in over 130 countries. Headquartered in Jacksonville, Florida, FIS employs more than 55,000 people worldwide and holds leadership positions in payment processing, financial software and banking solutions. Providing software, services and outsourcing of the technology that empowers the financial world, FIS is a Fortune 500 company and is a member of Standard & Poor's 500® Index. For more information about FIS, visit www.fisglobal.com