



PROPHET CONVENTIONAL LIBRARY

Non-linked product risk modeling for life insurers and pensions providers

Summary

The Prophet Conventional Library allows companies to model non-linked products. This library is typically used in the UK, South Africa and Asia, as well as some other regions. The library allows for typical liability product types and reserving features in these countries.

Embedded values and Market consistent embedded values can be calculated with this library, which can be run stochastically and dynamically and has goal seeking features for pricing. It can easily be customized through the open and flexible development environment to cater for company-specific features.

Key Features

- Whole life, endowment or term assurance
- Low cost endowment
- Annuities and income bonds
- With profit or non-profit
- Cash bonuses and rider benefits
- Life or pensions
- Mutual or proprietary
- Guaranteed annuity options
- Critical illness benefits

General Product Features

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

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

- Market consistent valuations
- Projection of cash flows on multiple different bases simultaneously
- Statutory reserves, including the option of gross premium reserves for both with-profit and non-profit business
- Bonus reserve valuation
- AIDS deficiency reserves
- Deferred acquisition costs
- Statutory valuation reserves on a second basis, normally for resilience calculation purposes
- Option to restrict calculations to statutory reserves

Reassurance Features

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

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Goal Seeking Features

- Goal seeking to determine premium rates 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
- 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

Optional Calculation Features

- Accruals method / achieved profits reserves and profits
- Calculation of historic and future asset shares
- Rebasing to determine projected accruals reserves which allow for experience assumptions to apply until each valuation date
- Calculation looping to repeat the calculation of mathematical reserves on a number of alternative bases
- Perform IFRS 17 calculations at contract level or provide group results to the IFRS 17 Group Calculations library

US GAAP Module

- A separate module is available for the Conventional Library to value contracts on a US GAAP basis.
The following are the main features of this module:
- FAS 60
- FAS 97 for limited payment contracts
- FAS 97 for investment contracts
- FAS 120

- Purchase GAAP
- SOP 03-1

Benefits

The Conventional Library allows customers to model their non-linked life assurance policies 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 library has an extensive database of actuarial formulas maintained by a large team of actuaries.

Products can be built quickly using a wizard selecting key product, experience, reserving and reporting features lending itself to very rapid implementation.

Most typical features are provided as standard. The library also includes goal seeking routines for pricing, different types of reinsurance and allows for stochastic projections.

The US GAAP and Analysis of Movement modules can also be added to this library for those companies who wish to model US GAAP or provide insight to the analysis of change from one reporting to period to the next.

The results from this library 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.

When used with other libraries, in particular the Asset Liability Strategy Library, the Conventional Library models can be used as part of the wider risk management of the company. This allows you to utilise the same code used for product pricing and embedded values in the wider ALM and risk management of the company.

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

Summary

Comprehensive, extensive, easily customizable purpose-built actuarial library for pricing and statutory reserving and can be used for the liability component of overall ALM.

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About FIS' Prophet

FIS' Prophet 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 10,000 users at nearly 1000 customer sites in over 70 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 53,000 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