Draft framework for Interim Values for registered non-unitized index-linked separate account annuities.

Background

IIPRC standards currently accommodate two types of annuities. Variable standards address unit-linked products where the values are tied to performance of a separate account and subject to nonforfeiture requirements in Section 7 of NAIC Model 250, Variable Annuity Model Regulation. Non-variable standards address products supported by a general account and subject to the requirement of NAIC Model 805, Standard Nonforfeiture Law for Individual Deferred Annuities (SNFLIDA).

There are no IIPRC standards for index-linked registered products supported by a separate account, where values are not linked to the performance of a separate account (non-unitized). However, insurance companies have been filing these products directly with the states and submitting them as variable annuities with nonforfeiture demonstrations comparable to those stated in Section 7 of NAIC Model 250, not the SNFLIDA.

The purpose of this draft is to propose a standard benchmark for determining whether Interim Values for index-linked registered annuities supported by a separate account that are not unit-linked for IVLAs provide equity to both the company and the contract holder.

Cash values for these products equal the Interim Value less surrender charges during an Index Term and the Account Value (or Index Option Value) less surrender charges at the beginning and end of an Index Term. Draft IIPRC standards will require compliance with the nonforfeiture requirements comparable to the requirements in Section 7 of NAIC Model 250.

Framework

The framework is based on the following principles:

a. The Interim Value methodology must provide equity to both the contract holder and the company which is defined to mean that Interim Values approximate the values of a hypothetical portfolio of assets backing the guarantees.

b. Assumptions used to value the hypothetical portfolio must be consistent with values underlying the market prices of the hypothetical derivative assets at the time the index crediting elements are determined.

c. The Hypothetical portfolio must be designed to perfectly hedge the benefit guarantees at the end of the term.

Definitions

“Hypothetical Portfolio” means hypothetical portfolio of fixed income assets and derivative assets designed to replicate an Index Option Value at the end of the Index Term.

“Interim value” means the value, attributable to one or more index options, used in determining the death benefit, withdrawal amount, annuitization amount or surrender value at any time other than the start date and end date of an index term.
“Index Strategy” means a method used to determine index credits with specified index or indices and cap, buffer, participation rate, spread, margin or other index crediting elements.

“Index Option Value” means the contract value or other well-defined base value in an index option at an index term start date or end date.

“Index Term” means the period of time from the term start date to the term end date over which an index change and index credit is determined.

Hypothetical Portfolio Value

The Actuarial Memorandum must describe the Hypothetical Portfolio and the Assumptions used to calculate its value at any time. The Hypothetical Portfolio may, but is not required to, be reflective of the insurance company assets used to support the contract guarantees.

The value of the Hypothetical Portfolio at any time is the sum of the Fixed-Income Asset Proxy value (with or without a market-value adjustment) and the Derivative Asset Proxy value.

“Fixed-Income Asset Proxy” represents a zero-coupon bond that accrues interest, simple or compound, over the Index Term and matures for a value equal to the initial Index Option Value.

“Derivative Asset Proxy” is a package of hypothetical derivative assets designed to hedge the risks associated with guaranteeing the Index Option Value.

The value of the Derivative Asset Proxy plus the value of the Fixed-Income Asset Proxy shall match the Index Option Value at the end of the Index Term as determined by the Index Strategy.

Assumptions used to value the Hypothetical Portfolio such as yields, implied volatility, risk-free rate, and dividend rate etc.,

1. Must be supported by market prices of the Fixed-Income Asset Proxy and Derivative Asset Proxy at the time index crediting elements are determined;
2. May be static throughout the Index Term or can be dynamic. If dynamic assumptions are used, the assumptions must be based on market prices of the Fixed-Income Asset Proxy and Derivative Asset Proxy at the time of valuation.

The actuarial memorandum must quantify the maximum difference between the value of the Hypothetical Portfolio and the Index Option Value at the beginning of the Index Term. The actuary must explain the source of and justify the difference.

Drafting Note: The difference is expected to be small, since any profit provisions, spreads, and expenses should be reflected as explicit charges disclosed in the contract. Any explicit charges deducted at the beginning of the Index Term would decrease the Index Option Value for the purpose of the comparison to the Hypothetical Portfolio value. There may need to be a provision for recognition of periodic charges to be assessed over the Index Term in the comparison required above.
The Interim Value, at any time during the Index Term, shall be equal to the value of the Hypothetical Portfolio.