Adopted by Life Actuarial (A) Task Force – 12/11/2022
Adopted by Life Insurance and Annuities (A) Committee – 2/24/2023

Actuarial Guideline LIV

Nonforfeiture Requirements for Index-Linked Variable Annuity Products

Background

The purpose of this guideline is to specify the conditions under which an Index-Linked Variable Annuity (ILVA) is consistent with the definition of a variable annuity and exempt from Model 805 and specify nonforfeiture requirements consistent with variable annuities.

A number of insurers have developed and are issuing annuity products with credits based on the performance of an index with caps on returns, participation rates, spreads or margins, or other crediting elements, that include a risk of negative index returns subject to limitations on the loss, such as a floor or a buffer. These products are not unitized and do not invest directly in the assets whose performance forms the basis for the credits.

There is no established terminology for these annuity products. These products go by several names, including structured annuities, registered index-linked annuities (RILA), or index-linked variable annuities, among others. This guideline refers to these products as index-linked variable annuities (ILVA).

Variable annuities are exempted from the scope of NAIC Model 805, *Standard Nonforfeiture Law for Individual Deferred Annuities;* however, NAIC Model 805 does not define the term "variable annuity".

NAIC Model 250, *Variable Annuity Model Regulation*, defines variable annuities as "contracts that provide for annuity benefits that vary according to the investment experience of a separate account." Section 7B of NAIC Model 250 provides that "to the extent that a variable annuity contract provides benefits that do not vary in accordance with the investment performance of a separate account" the contract shall satisfy the requirements of the NAIC Model 805.

The application of the NAIC Model 250 to a traditional variable annuity with unitized values is straightforward. The unitized feature provides an automatic linkage between annuity values and the investment experience of a separate account. Daily values (market values of the separate account assets) are the basis of all the benefits, including surrender values.

The fact that ILVA accounts are not unitized means they do not have values determined directly by the market prices of the underlying assets. Therefore, this guideline sets forth principles and requirements for determining values, including death benefit, withdrawal amount, annuitization amount or surrender values, such that an ILVA is considered a variable annuity and thereby exempt from Model 805. An ILVA that does not comply with the principles and requirements of this guideline is not considered a variable annuity and therefore is subject to Model 805.

Drafting Note: This guideline interprets the term "variable annuity" for purposes of exemption from Model 805. It is not intended to modify the definition of a variable annuity under Model 250 or other Model Regulations.

Scope

This guideline applies to any index-linked annuity exempt from the NAIC Model 805 on the basis that it is a variable annuity and includes index-linked crediting features that are built into policies or contracts (with or without unitized subaccounts) or added to such by rider, endorsement, or amendment.

Principles

This guideline is based on the following principles:

1. Interim Values defined in the contract provide equity between the contract holder and the insurance company.
2. Interim Values are consistent with the value of the Hypothetical Portfolio over the Index Strategy Term.

Definitions

"Derivative Asset Proxy" means a package of hypothetical derivative assets established at the beginning of an Index Strategy Term that is designed to replicate credits provided by an Index Strategy at the end of an Index Strategy Term.

"Fixed Income Asset Proxy" is a hypothetical fixed income asset.

"Hypothetical Portfolio" means a hypothetical portfolio composed of a Fixed Income Asset Proxy and a Derivative Asset Proxy.

"Index" means a benchmark designed to track the performance of a defined portfolio of securities.

"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 Strategy Base" means the notional amount used to determine index credits that does not change throughout the Index Strategy Term except for withdrawals, transfers, deposits, loans, and any explicit charges.

"Index Strategy Term" means the period of time from the term start date to the term end date over which an index changes and the index credit is determined.

"Interim Value" means the Strategy Value at any time other than the start date and end date of an Index Strategy Term.

"Strategy Value" means the value, attributable to an Index Strategy, used in determining values including death benefit, withdrawal amount, annuitization amount or surrender values.

"Trading Cost" means the additional cost of liquidating the derivative assets in the Derivative Asset Proxy or actual derivative assets supporting the Index Strategy that is not accounted for in the Derivative Asset Proxy calculation.

Text

The Index Strategy Base must equal the Strategy Value at the Index Strategy Term start date.

The Fixed Income Asset Proxy is assumed to be a hypothetical fixed income asset with a yield that results in

i. At the beginning of the Index Strategy Term, the book value of the Fixed Income Asset Proxy equal to the Index Strategy Base less the Derivative Asset Proxy value; and
ii. At the end of the Index Strategy Term, the book value of the Fixed Income Asset Proxy, assuming no change in yield, projected to equal the Index Strategy Base.

Drafting Note: The guideline defines the conditions under which an index-linked variable annuity is exempt from Model 805 on the basis that it is a variable annuity. A variable annuity provides daily values (analogous to Interim Values in this guideline) based on the market value of separate account assets. In order to more closely align an ILVA to a variable annuity Interim Values should be consistent with the market value of hypothetical assets supporting the ILVA (i.e. Hypothetical Portfolio). The market value of the assets may be determined by a fair value methodology or by applying an MVA to the book value. A state may want to consider whether including or excluding an MVA is appropriate. In making a determination regarding whether including or excluding an MVA is appropriate and, if applicable, what an acceptable MVA formula is, the state should consider whether the Interim Values provide reasonable equity between the contract holder and the insurance company.

The value of the package of derivative assets is determinable daily. Assumptions used to determine the market value of the Derivative Asset Proxy including implied volatilities, risk-free rates, and dividend yields must be consistent with the observable market prices of derivative assets, whenever possible.

Interim Values must be materially consistent with the value of the Hypothetical Portfolio over the Index Strategy Term less a provision for the cost attributable to reasonably expected or actual Trading Costs at the time the Interim Value is calculated.

If a contract provides Interim Values determined using a methodology other than a Hypothetical Portfolio methodology as described in this guideline, the company must demonstrate that the contractually defined Interim Values will be materially consistent over the Index Strategy Term with the Interim Values that would be produced using the Hypothetical Portfolio methodology for each combination of Index Strategy and Index Strategy Term under a reasonable number of realistic economic scenarios that include index changes that test crediting constraints and recognize initial option pricing market conditions.

The company must provide an actuarial memorandum with each ILVA product filing that includes the following:

1. Actuarial certifications must be included with each ILVA product filing and must include the following:
    a. Interim Values defined in the contract provide equity between the contract holder and the insurance company;
    b. The assumptions used to determine the market value of the Derivative Asset Proxy including implied volatilities, risk-free rates, dividend yields, and other parameters required to value the derivatives are consistent with the observable market prices of derivative assets over the Index Strategy Term, whenever possible. Valuation techniques include the standard Black-Scholes method, Monte-Carlo Simulation techniques, and other market consistent option valuation techniques for more complex options;
    c. The contractually defined Interim Values are materially consistent with the Interim Values that would be produced using the Hypothetical Portfolio methodology for each combination of Index Strategy and Index Strategy Term over the Index Strategy Term less a provision for the Trading Costs at the time the Interim Value is calculated; and
    d. Any Trading Costs represent reasonably expected or actual costs at the time the Interim Value is calculated.

2. If the Interim Values are determined using a methodology other than the Hypothetical Portfolio methodology described in this guideline, the actuary shall describe the testing performed to verify that the values are materially consistent with the Hypothetical Portfolio methodology. The actuary should define any parameters or assumptions used in determining material consistency and provide a summary of the results of the testing.

3. Descriptions of
    a. The value of the Fixed Income Asset Proxy;
    b. The market value adjustment formula, if any;
    c. The market value of the Derivative Asset Proxy including any Trading Costs; and
    d. All formulas, methodologies and assumptions used to calculate these values for each Index Strategy and Index Strategy Term as well as the sources for all assumptions.

ILVA nonforfeiture benefits for Index Strategies subject to this guideline must comply with Section 7 of Model 250 not including Section 7.B with net investment return consistent with the requirements for determining Interim Values in this guideline.

Effective Date

The Guideline applies to all contracts (including associated riders, endorsements, or amendments) issued on or after July 1, 2024.

PROJECT HISTORY

**ACTUARIAL GUIDELINE LIV—
NONFORFEITURE REQUIREMENTS FOR INDEX-LINKED
VARIABLE ANNUITY PRODUCTS**

1. **What issues was the project intended to address?**

The purpose of the Guideline is stated as follows: "The purpose of this guideline is to specify the conditions under which an Index-Linked Variable Annuity (ILVA) is consistent with the definition of a variable annuity and exempt from Model 805 and specify nonforfeiture requirements consistent with variable annuities."

2. **What states participated in drafting the model?**

The following states are currently members of the Index-Linked Variable Annuity (ILVA) (A) Subgroup of the Life Actuarial (A) Task Force: Ohio (Chair), Utah (Vice-Chair), California, Illinois, Indiana, Nebraska, New Jersey, New York, Texas, Virginia, and Washington.

3. **What general procedure was followed in drafting the model? What efforts were made to assure that all interested parties were provided an opportunity to comment during the drafting process?**

In response to the emergence of products commonly referred to as index-linked variable annuities, registered index-linked annuities, or other names, Pete Weber (OH) recommended that the Life Actuarial (A) Task Force form an ILVA (A) Subgroup to draft a standard that would define the minimum interim values for these products at a call of the Task Force on June 17, 2021. After approval of the formation of the ILVA (A) Subgroup from the Task Force and subsequent approval from the Life Insurance and Annuities (A) Committee and the NAIC's Executive (EX) Committee and Plenary, open meetings of the subgroup began.

The work of the subgroup was coordinated with all industry interested parties. In addition to twelve open subgroup conference calls that were held over 2021 and 2022 (see Table 1) to develop a draft Actuarial Guideline, several updates were provided to the Life Actuarial (A) Task Force during open sessions. Notice of these conference calls was posted on the NAIC's home page on the Internet and e-mailed to approximately 500 interested parties, including representatives of the American Council of Life Insurers, the Committee of Annuity Insurers, and the American Academy of Actuaries.

Table 1:

Meeting Date	Open/Regulator-only?
7/15/2021	Open
9/23/2021	Open
11/23/2021	Open
2/16/2022	Open
3/2/2022	Open
3/9/2022	Open
3/17/2022	Regulator-only
5/17/2022	Open
5/18/2022	Open
7/13/2022	Open
8/29/2022	Open
9/20/2022	Open
9/27/2022	Open

4. **What significant issues were raised during the drafting process, and how were those issues resolved?**

Two key questions emerged during the process of drafting the actuarial guideline:

1. Should the actuarial guideline allow companies to utilize market value adjustment term lengths other than the maturity of the Fixed Income Asset Proxy?
2. Should the actuarial guideline allow companies to continue to have to the option to include or exclude a market value adjustment in their ILVA products?

There was concern that reaching a strong consensus on both of these items would be time consuming if not impossible. To address both issues and advance the actuarial guideline, revisions were made to remove specific requirements related to market value adjustments. In place of specific market value adjustment requirements, a drafting note was added that granted more flexibility to the states to be able to approve products that are consistent with the principles laid out in the actuarial guideline. In particular, the first principle of the actuarial guideline states that the interim values must provide equity between the contract holder and the insurance company. That principle should guide states in determining whether a market value adjustment is appropriate or not.

5. What are the implications of this project for accreditation and codification?

The Guideline should be handled in a manner that is consistent with the treatment of other guidelines.

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