

Guide to Entering the Indexed Life Insurance and Annuity Marketplace

Douglas Brown, ASA, MAAA
Trilogy Actuarial Solutions LLC
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Introduction

If interest rates continue to remain at historically low levels, companies that offer only products supported by fixed crediting rates may find it increasingly difficult to offer compelling and competitive annuity and long-term life insurance products, particularly products focused on cash value accumulation.

This document was prepared to provide an overview of the activities required to enter the indexed life insurance and annuity marketplace. This document identifies the infrastructure required to manufacture and distribute indexed products, product features that are unique to this market, and considerations related to the decisions that the company will need to make regarding product development and management. This document was developed to help companies develop a strategy for entering the indexed life insurance and annuity marketplace. Additional detail will be required to develop complete product specifications, policy forms, and operational procedures.

The product features described in this document reflect common product specifications that are currently available in the market and that may be essential to the development of a successful new product launch. Other variations exist, and this document is not intended to provide an exhaustive overview of all the product features available in the market.

This document does not address registered indexed annuities. This is a relatively new product design that offers significantly more upside index participation in exchange for greater downside risk. While these products contain guaranteed minimum values, they are still registered products that must be sold by registered representatives.

Product Design Features

Indexed Crediting Strategies

The defining feature of indexed life insurance and annuity products is the availability of one or more indexed interest crediting strategies. Indexed products typically include at least one fixed rate crediting option. Contract holders specify the desired allocation among the available crediting strategies in the application. Account value can be transferred or reallocated at the end of each crediting term with sufficient advance notice.

The policy forms are frequently developed on a modular basis where crediting strategies are defined and offered via riders. This allows the company to add or discontinue crediting strategies over the life of the contract.

Indexed crediting strategies are defined based on the following collection of parameters:

Underlying Index: The amount of interest credited is ultimately tied to the performance of an underlying index. The S&P 500 is very common, but not the only index used. Crediting strategies are available in the market based on other public indices (e.g., Nasdaq-100, Russell 2000, etc.) as well as proprietary indices (e.g., Barclay's Atlas & Trailblazer Indices). Proprietary indices will

typically contain a distinguishing characteristic (e.g., volatility-controlled index) and may be supported by marketing materials developed by the investment bank managing the index.

Crediting Term: One year is the most common crediting term; however, longer periods, including two or more years, are available. Indexed interest is credited at the end of each term. Indexed interest is not typically credited on account value deducted before the end of a crediting term due to withdrawals, surrenders, or the payment of death benefits.

Index Method; Indexed interest is determined based on the change in the index value during the crediting term. Several methods of measuring the index growth rate are in common usage. Common examples include:

- Point-to-Point: index growth is measured as the change in the index value over the term (ending value – starting value) ÷ starting value.
- Daily Average: index growth is measured as the average of the index value on each market date during the term divided by the starting value.
- Monthly Average: index growth is measured as the average of the index value at the end of each monthly during the term divided by the starting value.
- Monthly Sum: index growth is measured as the sum of the monthly growth in the index during the term (Σ (monthly ending value – monthly starting value) ÷ monthly starting value).

Hedging Budget: The basic hedging budget is equal to the net earned rate less the pricing spread divided by one plus the net earned rate (assuming a zero floor and no multipliers). The hedging budget is used to purchase the hedge and determines the value of the index participation parameters.

Index Participation: Index participation refers to the portion of the index growth that is credited to the contract. Index participation is determined based on the parameters outlined below. The value of these parameters at any given time is determined based on the hedging budget. Strategies will typically identify a single parameter that is the primary degree of freedom. This is the parameter that will be adjusted to reflect changes in interest rates and option prices to keep the cost of hedging the strategy within the hedging budget. Strategies may be identified by their primary degree of freedom (e.g., cap focused strategy). Secondary degrees of freedom may be adjusted to reflect more substantial changes in the economic environment.

- Floor: The floor defines the minimum indexed crediting rate that will be paid for the current term irrespective of the actual index growth rate. The floor is typically defined as zero. Floors higher than zero provide greater guaranteed growth in the account value but decreases the hedging budget and thereby participation in upside index performance. The floor is typically managed as a secondary degree of freedom.
- Cap: The cap defines the maximum indexed crediting rate that will be paid irrespective of the actual index growth rate. Strategies utilizing a cap as the primary degree of freedom frequently have a 100% participation rate.

- **Participation Rate:** The participation rate defines the percentage of the index growth that will be considered in determining the indexed crediting rate. Strategies utilizing the participation rate as the primary degree of freedom frequently have no cap but may utilize a spread.
- **Spread:** The spread is the amount that is deducted from the index growth rate in the determination of the indexed crediting rate (i.e., the spread represents the amount that the index growth rate must exceed before indexed interest will be credited). The spread is typically used in conjunction with a participation rate focused strategy.

Timing: In order to manage the number of hedging positions open at any given time, crediting strategies are typically constrained to occur on a set frequency (e.g., monthly, biweekly, or weekly). For index universal life insurance, this is managed by depositing all premium payments into a sweep account that will transfer the account value to the various crediting strategies based on the requested allocation specification on set dates. For annuity products, this is frequently managed by limited the number of issue dates or depositing the initial premium into a fixed crediting strategy and transferring the account value to the crediting strategies on set dates.

Considerations:

The number of crediting strategies available is frequently limited to achieve larger hedging volumes. In addition, agents, and consumers can become paralyzed by too many choices, especially when the product is new to the company.

In an inaugural product launch, it may be prudent to consider starting with a small number of choices. Offering at least one S&P 500 strategy is probably a good idea given the popularity of this index and the availability of historical data. If a modular construction approach is used, the company can always expand the collection of crediting strategies offered in the future to address changes in market demand.

Sample Starting Index Strategies:

- S&P 500 Annual Point-to-Point with Cap (0% Floor, 100% Participation Rate, and No Spread)
- S&P 500 Annual Point-to-Point with Participation Rate (0% Floor, No Cap, and No Spread)
- One-Year Fixed Crediting Strategy

Reserves

Reserves for indexed life insurance and annuity products are calculated using similar methods to their fixed counter parts. The determination of the guaranteed interest crediting rate is governed by Actuarial Guidelines 35 (annuities) and 36 (life insurance). These guidelines provide multiple methods for determining the guaranteed interest rate and require additional periodic actuarial certifications.

Iowa Administrative Code 191-97.1(508) et seq. permits insurance companies to reduce income statement volatility by valuing the hedge position on an amortized cost basis and ignoring the impact of the current crediting term on the statutory reserve. This is a well-known rule and

companies domiciled in other states have sought permitted practices from their domiciliary regulator to implement this practice.

Life Insurance Features

Chassis: Universal life is the preferred product chassis for including equity index participation. The unbundled account value with an explicit crediting rate lends itself well to the incorporation of indexed crediting strategies.

Sales Presentations: Indexed universal life can be illustrated similar to fixed universal life insurance products with the added benefit of higher potential interest crediting rates resulting from the indexed crediting strategies. The unique features of these products have resulted in the development of common sales presentations that are used in the marketing of these products.

Providing significant tax-free supplemental retirement income is a very popular sales presentation. These illustrations typically involve paying the MEC 7-pay premium limit prior to the intended retirement date and then taking income by withdrawing the premium basis and then taking policy loans.

Preferred Loans: In order to increase the amount of income that can be illustrated and potentially taken from the policy, most companies offer a loan option that charges a relatively low fixed loan rate while allowing the account value collateralizing the loan to remain allocated to indexed crediting strategies. This feature increases the amount that can be borrowed when the indexed crediting strategies credit a higher rate of interest than the loan interest rate and decrease the amount that can be borrowed when the indexed crediting strategies credit a lower rate of interest than the loan interest rate.

Overloan Protection: Companies that promote and illustrate taking significant income from the policy following retirement, typically provide an overloan protection benefit that is designed to prevent the policy from lapsing due to insufficient cash value to collateralize the loan which would result in significant taxable income reported in the year of lapse, subject to certain conditions. This benefit works by restructuring the policy such that the cash value is guaranteed to grow at the same pace as the loan. Once this benefit is invoked, the policy offers a very small residual death benefit based on the cash value corridor.

Illustration Testing: Actuarial Guideline 49-A imposes limitations on the crediting rate that can be used with indexed crediting strategies, limits the difference between the illustrated crediting rate and the illustration policy loan interest rate, and provides guidance for determining a net earned rate for illustration testing that reflects the impact of the hedging program.

Commissions: The commission rates for indexed universal life insurance are typically the same as the company's other permanent life insurance products; however, the target premium rates tend to be greater than other products (e.g., equal to either the guideline level or MEC 7-pay premium).

Annuity Features

Premium: In order to maintain alignment of the indexed crediting terms, indexed annuities are typically single premium products. Occasionally, additional premium is accepted in the first contract year. When additional premium is accepted, it is allocated to the fixed account until the expiration date of the first crediting term.

Guaranteed Income Benefits: Guaranteed lifetime withdrawal benefit riders are a popular optional benefit offered with indexed annuities. These riders provide guaranteed withdrawal benefits for the remaining lifetime of the annuitant following a stated accumulation period. During the accumulation period, a separate benefit base is accumulated. The benefit base is equal to the greater of the account value and the premium accumulated at a specified rollup rate. The guaranteed withdrawal benefit is expressed as a percentage of a benefit base that is determined based on the age of the annuitant. A reduced benefit percentage is typically available in the case of joint annuitants. The guaranteed income benefit is reduced to reflect withdrawals in excess of the guaranteed income amount during the income period.

Products featuring guaranteed income benefits are frequently supported by illustrations that demonstrate the income that could be received based on assumptions such as the rate of interest earned, the age at which withdrawal benefits will commence, and the frequency of withdrawal benefits.

While this is a common optional benefit, it does increase the product complexity and typically increases the minimum reserves. Given the additional complexity and additional reserves, new entrants might consider launching the initial products without this benefit and adding this benefit as an enhancement to the product portfolio later.

Premium Bonuses: Some products offer an optional premium bonus (typically ranging from 5 to 10% of premium). Products with a premium bonus have a lower hedging budget than similar products without a premium bonus. A portion of the bonus and its associated interest are recovered when the contract is surrendered during the surrender charge period.

Enhanced Participation: As interest rates and the associated hedging budgets have fallen, companies have begun to offer contract holders the option to increase the hedging budget by assessing an annual fee. This fee effectively reduces the guaranteed floor on the account value growth and can significantly increase upside index participation.

Surrender Charge Period: Indexed annuities commonly have 7 to 10-year surrender charge periods. Longer surrender charge periods support a longer investment horizon and higher hedging budgets. It is also very common for a market value adjustment to apply during the surrender charge period. A market value adjustment decreases the RBC C-3 component and provides additional protection against interest rate risk.

Commission: Commission rates are generally higher for indexed annuities than comparable fixed annuities. Street level commission rates can be as high as 7 to 10%.

Required Infrastructure

A high-level overview of the additional infrastructure that a company will require to manufacture and distribute indexed products follows.

Hedging Program

A key element to supporting indexed products is managing an appropriate hedging program. While more complex dynamic hedging programs can be used, this paper will focus on static hedging programs based on purchasing options that replicate the company's indexed crediting strategies. As part of the process of developing a hedging program, the company will need to develop and file a derivatives use plan.

Public Indices (e.g., S&P 500): There are two common approaches to developing static hedges for public indices. One is to purchase custom over the counter options from investment banks. This approach involves counter party risk, and the counter parties typically require a minimum transaction amount. The other is to hedge using exchange traded options that are selected to replicate the indexed crediting strategies (e.g., long ATM call option for participation rate focused strategies and a combination of a long ATM call option and a short OTM call option for cap focused options). Some indexed strategies are better suited to hedging using exchange traded options (e.g., point-to-point cap or participation rate strategies) than others (e.g., strategies involving averaging).

Proprietary Indices: The investment bank offering the proprietary index will typically sell the options required to hedge indexed crediting strategies using their indices to licensed users.

Illustrations: The company's illustration system will need to accommodate the company's indexed crediting strategies and any sales presentations and associated solves that the company wishes to support.

The company's current procedures for annual illustration testing and certification must be updated to reflect the special considerations related to indexed products (e.g., caps on illustrated rate, determination of the net earned rate, etc.).

Policy Administrative System: The company's administrative platform must accommodate the desired indexed crediting strategies and the ability to allocate the account value to multiple crediting strategies. In addition, the administrative platform must support any unique features that are incorporated in the product specifications (e.g., preferred loans, guaranteed withdrawal benefits, etc.). In addition, administrative procedures must be developed to record closing index values and quote or pay benefit amounts that depend on index performance.

Valuation Systems: The company's valuation system must be updated to reflect the product specifications and method selected for projecting future account value growth based on the indexed crediting strategies.

Agent and Employee Training: It will be prudent to develop employee and agent training programs during the development and rollout of the company's first-generation indexed products. These programs should include information regarding indexed product mechanics, company specific product specifications, competitive benchmarking, ideal prospects, and sample sales presentations.

Actuarial Certifications: The company will need to make periodic actuarial certifications related to illustration testing (applies to life insurance products only) and the method selected for projecting future indexed interest credits in the determination of the minimum statutory reserve. If the Market Value Reserve Method with Black-Scholes Projection is selected, a qualified actuary must provide a reasonableness and consistency with assumptions certification with each quarterly and annual statement filed.

Trilogy Actuarial Solutions LLC

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Email: douglas.brown@trilogyactuarial.com
Telephone: (346) 348-2757
Website: www.trilogyactuarial.com
LinkedIn: www.linkedin.com/in/douglas-brown-93725311