

January 5, 1998

Response of the American Academy of Actuaries to the
Securities and Exchange Commission

Concept Release No. 33-7438,

Request for Comment on information about the structure of equity
indexed products and the manner in which they are marketed, and other
matters for consideration in addressing federal securities law issues
raised by equity indexed insurance products

File number S7-22-97

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Introduction

The American Academy of Actuaries welcomes this opportunity to respond to the Securities and Exchange Commission (SEC) Concept Release No. 33-7438, File No. S7-22-97, on Equity Indexed Insurance Products (EIIPs) and would be pleased to further assist the SEC in its review of the applicability of securities laws to EIIPs. In this document, we offer our thoughts on equity indexed insurance product features, assumption of investment risk, and marketing of equity indexed insurance products. We make the assumption that the SEC will receive adequate information regarding the applicability of state insurance regulation from other interested parties; however, should there be any question concerning terms or concepts, the Academy would be pleased to provide further explanation.

The American Academy of Actuaries (Academy) is the public policy organization for actuaries of all specialties within the United States. In addition to setting qualification standards and standards of actuarial practice, a major purpose of the Academy is to act as the public information organization for the profession. The Academy is nonpartisan and assists the public policy process through the presentation of clear actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials and congressional staff, comments on proposed federal regulations, and works closely with state officials on issues related to insurance.

In January, 1997, the Academy formed the Equity Indexed Products (EIP) Task Force to study the issues involved with EIIPs. This work was undertaken at the request of the Life and Health Actuarial Task Force (LHATF) of the National Association of Insurance Commissioners (NAIC). The primary focus of the Academy EIP Task Force was to provide input to LHATF on all actuarial issues associated with these products. An in depth review was conducted of issues including risk analysis of these products, establishment of adequate reserves, establishment of minimum nonforfeiture values, adequate disclosure in marketing materials and insurer investment practices. The Academy EIP Task Force's final report was presented at the December, 1997 NAIC meeting.

While the Academy EIP Task Force is still working with the NAIC on certain aspects of recommendations on approaches to regulating EIIPs, a final Academy EIP Task Force report was delivered at the December, 1997 NAIC meeting.

Please contact Stephen Rentner, Policy Analyst at the American Academy of Actuaries, at (202) 785-7875 if you would like additional information.

Executive Summary

EIIPs are best characterized as ordinary insurance products with a new way of calculating non-guaranteed elements. Since most EIIPs are designed to be general account products, the investment risk for most EIIPs is assumed primarily by the insurer. The analysis of disintermediation risk shows that EIIPs are placing more risk on insurers than traditional insurance products.

Description of Equity Indexed Insurance Products (EIIPs)

- Equity indexed insurance products are insurance products that tie all or a portion of the benefits payable to the performance of an external index.
- If written as an individual life insurance or annuity product, the EIIP must satisfy the Standard Nonforfeiture Law or other applicable nonforfeiture legislation or regulation. Except in the case of certain modified guaranteed (market value adjusted) products, this is done by the inclusion of a floor below which the surrender value of the contract is guaranteed not to fall. This floor normally consists of a percentage, such as 90%, of premiums deposited plus interest at a rate, such as 3%, consistent with the applicable nonforfeiture law. Contracts written on a group basis are not subject to the same nonforfeiture rules, but frequently include similar contractual floor guaranties. The discussion below is limited to EIIPs written as individual life or annuity contracts which satisfy the Standard Nonforfeiture Law or other applicable nonforfeiture legislation or regulation unless otherwise stated.
- The index is usually a broad-based market average of securities prices. A wide variety of formulas are used to determine credits based on index performance. These formulas are normally fully specified in the contract, except that the insurer sometimes reserves the right to change the percentage of index performance that is credited to the contract (the “participation rate”).

Assumption of Investment Risk

- The contract owner assumes the following risks:
 - the risk of index performance above the floor (but not the risk of performance of a specific asset or pool of assets);
 - the risk of insurer discretion if participation rate is variable; and
 - the risk of insurer insolvency (but this risk is significantly limited by state reserve, risk based capital and asset adequacy laws and regulations).
- Compared to variable products, much less risk is normally assumed by the contract owner.

- Compared to market value adjusted EIIPs, the contract owner assumes significantly less interest rate risk.
- The insurer assumes the following risks:
 - the risk that actual underlying assets will perform differently than the index (this includes both the default risk for all assets used by the insurer to provide cash flows to pay contract benefits and the risk that such underlying assets will not increase in value as quickly as does the index); and
 - the risk that deaths and contractually permitted withdrawals will occur at rates different from those which were assumed in pricing the product.
- The insurer also assumes the responsibility for setting strategies to manage product risk that will stand up to regulatory scrutiny and satisfy state laws and regulations on reserves, risk based capital and asset adequacy. (Asset adequacy analysis provides protection for the nonforfeiture floor in particular.)

Marketing of EIIPs

- Life insurance and annuity products are designed to provide for long term needs. Proper utilization requires illustration of both guaranteed and nonguaranteed elements on some reasonable basis.
- For life insurance products with non-guaranteed elements, including Equity Indexed Life Insurance, the NAIC has developed a model regulation dealing with illustrations that requires an actuarial certification. A model regulation dealing with annuities, including Equity Indexed Annuities, is under development.
- Illustrating the results of an index is something which has not been commonly done by insurers. Several approaches are being tried.

Description of Equity Indexed Insurance Products

Equity indexed insurance products are insurance products that tie all or a portion of the benefits payable to the performance of an external index.

Products Currently Available

There are three general types of EIIPs currently offered in the marketplace: equity indexed deferred annuities, equity indexed immediate annuities, and equity indexed life insurance. The Academy EIP task force provided a detailed description of each of these equity indexed insurance products to the NAIC in its December 1997 report. This portion of the report has been attached for reference as Appendix A.

Any life insurance or annuity product that provides for the payment of nonguaranteed elements or dividends can be made into an equity indexed insurance product by adding a contractual provision that ties a nonguaranteed element to an index. This paper will discuss General Account EIIPs, which satisfy the minimum guaranties found in state insurance nonforfeiture laws.

There are other insurance products which could be considered to be EIIPs, but which either do not invest funds in the General Account, or do not satisfy the minimum guaranties found in state insurance nonforfeiture laws. Examples include variable annuities with a minimum guaranteed return and EIIPs with market value adjustments which invade the guaranteed minimum values specified in the nonforfeiture law. These products will not be discussed in this paper and should be distinguished from the General Account EIIPs.

Minimum Guaranties Provided

The comments on the following pages refer to products where liabilities and supporting assets are held in the General Account of the insurer. All of these products have guaranteed minimum values that meet or exceed the requirements specified in the state nonforfeiture laws. These minimum values are the same as those offered on traditional insurance products.

Deferred Annuities

Single premium equity indexed annuities commonly guaranty surrender values at least equal to the accumulation of 90% of the premium at an interest rate of 3%. Flexible premium equity indexed deferred annuities provide a cash value floor guaranty of at least 65% of the first year premium and 87.5% for the subsequent premiums, all accumulated at 3%. This scale equals the values required by the NAIC Model Standard Nonforfeiture Law for Individual Deferred Annuities. Some of the equity indexed deferred annuities offer higher floor guaranties than the statutory minimums.

While the Standard Nonforfeiture Law minimum requirements are identical, most fixed (non-EIIP) deferred annuities generally guaranty an interest rate of 3% applied to 100% of the premium. These contracts are voluntarily exceeding the requirements of state law. Also traditional fixed deferred annuities generally also assess a surrender charge upon early termination of the contract. In contrast, most EIIP deferred annuities provide a guaranty of 3% interest applied to 90% of the premium. This satisfies the statutory nonforfeiture requirements.

Life Insurance

Also, equity indexed life insurance products available in the marketplace today (all current products are of a universal life chassis) have been designed with minimum cash values that comply with minimum requirements specified in the NAIC Universal Life Insurance Model Regulation. This law requires minimum values through the maximum mortality charge and minimum interest rate requirements.

Nonforfeiture Recommendation

The Academy EIP task force reviewed the product designs available in the marketplace and the nonforfeiture requirements under state law. It recommended to the NAIC that both equity indexed annuities and equity indexed life insurance products be required to continue to follow the current nonforfeiture laws for fixed products.

As a result of state nonforfeiture requirements, EIIP contract owners have contractual protection of principal. Moreover, once amounts are unconditionally credited they cannot be forfeited afterward, regardless of the index performance.

Index Participation Formula

EIIPs tie some of the benefits in excess of the minimum guaranteed benefits to the performance of an external index. Currently most products tie these benefits to the performance of the S&P 500. Some current products do tie some of the benefits to the performance of another index, such as a bond index.

The formulas currently being utilized to tie the benefits to an external index currently have many forms. They vary from guarantying all elements of the formula for the entire term or several years, to an annual reset formula where the elements of the formula are declared annually at the beginning of each policy year. A more detailed description of the possible formulas can be found in Appendix A.

Assumption of Investment Risk

The analysis of risk associated with an EIIP or any other general account insurance product should focus on the allocation of risk between the contract owner and the insurer. This allocation is established by the terms of the contract. The investment risk borne by the contract owner in relation to such a contract is independent of the investment strategies used by the insurer in supporting the liabilities of a class of such contracts.

To the extent that the insurer has a sound and reasonable investment strategy which precludes insolvency, the equity linked credits to an EIIP are not subject to the performance of the underlying assets. This is unlike a variable product, where the performance is tied to the performance of the underlying assets. The equity linked credits on an EIIP are defined by a pre-determined formula at issue and at pre-determined subsequent points in time, such as anniversaries, specified in the contract.

Risks Assumed by Contract Owner

There are several elements of EIIPs to consider when analyzing contract owner investment risk. First, while the index values reflect general market volatilities (subject to minimum values being credited), they do not depend on the value of a specific pool of assets. Second, the risk faced by the contract owner due to potential insurer insolvency is significantly limited by state insurance reserve laws and other regulations. In addition, policy values are backed by state guaranty associations.

Effect of Equity Indexed Crediting Formula on Contract Owner Risk

EIIPs remove much or all of the insurer's discretion with respect to equity linked credits. With the exception of some annual reset products, the equity formulas embedded in these contracts are guaranteed for the entire term. Although the performance of the equity index is uncertain, the contract owner has a prospective guaranty from the insurer to provide future values under the insurance contract according to the formula stated in the contract.

Some equity indexed annuities guaranty all components of the index formula at the initial level for the entire term period (where the term period is considered to be the length of time after which the contract owner may have access (without penalty) to benefits provided by equity indexed credits). This type of EIIP is analogous to those traditional fixed deferred annuities which guaranty the initial declared rate of interest for a multi-year period.

Other equity indexed deferred annuities, usually those of the annual reset type, reserve the right for the insurer to adjust one or more components of the formula during the term. For example, an annual reset product might have a participation rate of 70% in the first

year of the term and reserve the right to change the rate as a new year begins; it might have an underlying guaranty of, say, 50% for all years in the term.

However, all equity indexed deferred annuities of this second type change the formula on a policy anniversary and are analogous to traditional fixed deferred annuities where the current rate of interest is declared at the beginning of each policy year and guaranteed for the entire year. These contracts are designed to comply with the Rule 151 requirement that the rate of interest be guaranteed not to change more frequently than once per year.

An insurer is able to declare the rate of excess interest to be credited to a traditional fixed annuity at the beginning of the year because the yield to be earned on the fixed income investments supporting the annuity is known in advance. With equity linked credits, it is not possible to declare such credits in advance, since one cannot know how the equity markets will perform until the year is over. For EIIP contracts, the formula and its components (other than the final index values) are known in advance by the EIIP contract owner.

It is clear that EIIPs dramatically reduce the investment risk retained by the contract owner relative to variable contracts. Variable contracts have no guaranteed cash values and follow the vagaries of the market on a daily basis and can lose substantial amounts of a contract owner's principal. EIIP owners have guarantees protecting their principal and interest earnings, and can only receive additional positive credits from the equity linked benefits provided under the terms of their contracts. A major risk component of equity investing, a negative return, is eliminated under an EIIP.

Effect of State Insurance Laws and Regulations Designed to Reduce Risk of Insurer Insolvency

Under the provisions of EIIP contracts, the investments held by the insurer in support of its obligations under the contract do not directly affect the contract owner. It is the quality of the insurer, not the specific assets held by the insurer, that backs the EIIP contract and all other General Account contracts. As long as the insurer can honor its obligations, the investment policies of the insurer are not directly related to contract performance.

However, if the underlying investments were to create an undue risk of insurer insolvency, the contract owner would, of course, be affected. This risk is no different than in any other insurance contract, and the EIIP contract owner bears this risk equally with all other contract owners of the insurer.

Ensuring the solvency of insurers for the benefit of the public is one of the primary purposes of state insurance regulations. Various insurer solvency requirements have been

adopted by the states. This includes adoption of several model regulations developed by the NAIC.

Applicability of Minimum Reserve Standards

EIIPs' minimum reserve levels are governed by each state's valuation law, which typically requires the use of the Commissioners' Annuity Reserve Valuation Method (CARVM) for annuities and the Commissioners' Reserve Valuation Method (CRVM) for life insurance. The Academy task force has made recommendations to the NAIC on how to interpret these methods for application to EIIPs.

Equity Indexed Deferred Annuities.

At the September 1997 meeting of the NAIC, the Academy EIP Task Force recommended four interpretations of CARVM to be used for equity indexed deferred annuities. After discussion with LHATF, these recommended interpretations were reduced to three. The NAIC is currently exposing for comment Actuarial Guideline ZZZ based on these recommendations. Actuarial Guideline ZZZ is expected to become effective for year end 1998. However, at least one state is requiring companies to comply with the current draft of the Guideline for year end 1997.

In developing these recommendations, the Academy EIP task force found that equity indexed annuity reserves could be established using CARVM, but a mechanism was needed to reflect the implied cost of the equity indexed guaranties. The Academy proposals deal with establishing a cost for the equity indexed guaranties and incorporating this cost in the existing CARVM regulation.

There are two basic methods reflecting acceptable interpretations of CARVM for equity indexed deferred annuities.

Type I Reserve Method:

The Type I reserve method (Enhanced Discounted Intrinsic Value Method or EDIM) reflects the intrinsic value of the hedge both on the liability side (reserve) and on the asset side of the balance sheet. Companies electing to use EDIM must certify quarterly that they are satisfying "hedged as required" criteria. Basically, these criteria indicate that a company has hedged its liabilities appropriately, reflecting both interim and maturity benefits. In addition, they indicate that the insurer regularly monitors the effectiveness of the hedging strategy.

Type II Reserve Methods:

There are two Type II reserve methods, CARVM with Updated Market Values (CARVM-UMV) and Market Value Reserve Method (MVRM). CARVM, for fixed deferred annuities, requires future guaranteed benefits to be projected into the future. The CARVM reserve is the greatest present value of future projected benefits. The idea behind CARVM-UMV is that future guaranteed benefits can be valued as the floor of the benefit plus the future value of the market value of the option that pays the excess of the benefit over the floor of the benefit. In a slight variation, MVRM projects the expected future index levels. The index at maturity is projected to be the strike price plus the future value of the current market value of the call option. Intervening index levels are calculated using geometric interpolation. Once the index levels are projected, future guaranteed benefits can be calculated. Both of the Type II reserve methods hold the liability hedges at market value. Because they track changing market conditions better than a Type I reserve method, they are not subject to the “hedged as required” criteria.

Equity Indexed Life and Single Premium Immediate Annuities.

The Academy EIP Task Force made reserving recommendations for equity indexed life products and for payout annuities at the December 1997 NAIC meeting. It is anticipated that the NAIC will then use these recommendations as a basis for developing Actuarial Guidelines for these two products.

Appointed Actuary Statement of Asset Adequacy

As part of the state financial solvency requirements, insurers above certain minimum sizes are required to complete for all products an analysis of asset adequacy for sensitivity to financial losses due to changes in both interest rates and contract owner behavior. Cash flow projections are completed for insurance contract liabilities (i.e., contract holders withdrawing money based on sensitivity to the scenario's interest rate environment) and asset values (i.e., the ability of investment earnings or the sale of assets to meet the scenario's anticipated cash demands).

The Academy EIP task force has recommended that a statement of asset adequacy be required for all companies writing material amounts of EIIPs. This recommendation has been incorporated in the NAIC's Actuarial Guideline ZZZ. Since EIIPs are subject to these asset adequacy testing requirements, it is likely that insurers will be purchasing hedges to satisfy equity indexed contractual obligations.

The presence of such hedging does not mean that the equity indexed contract owner is receiving a pass-through of investment results from the insurer. The insurer is obligated to satisfy the equity indexed obligations regardless of the presence or absence of hedging investments.

Contract Filing Requirements

The Academy EIP Task Force has made recommendations to the NAIC on contract filing requirements. The goal of these requirements is to provide state insurance departments with adequate information to understand the submitted policy form and proposed key management practices of the insurer. A copy of these recommendations is enclosed in Appendix B.

State Risk Based Capital Requirements & Investment Laws

Each state has insurance laws and regulations that establish the minimum surplus requirements (risk based capital) based on the risk assumed by the company. They also have investment laws and regulations which establish acceptable classes and amounts of insurer investments. The purpose of the risk based capital requirements and the investment laws are to ensure that insurers will have a very high probability of remaining solvent. The current requirements for equity indexed products are the same as the requirements for traditional deferred annuities.

Guaranty Association Coverage

Life and health insurance guaranty associations are organizations created by the District of Columbia, Puerto Rico and the 50 states to protect the policyholders and beneficiaries of an insolvent insurer, up to specified limits. All insurance companies licensed to write life or health insurance or annuities in a state are required, as a condition of doing business in the state, to be members of the guaranty association. If a member company becomes insolvent, money to continue coverage or pay claims is obtained through assessments of other insurance companies writing the same line(s) of insurance as the insolvent company.

The Life and Health Insurance Guaranty Association Model Act (Model Act) makes no distinction between policies and contracts with equity indexed features and those without. A life insurance policy or allocated annuity with equity indexed features would appear to be treated as any other life insurance policy or allocated contract. Thus, premiums received on such contracts would appear to be subject to assessment regardless of coverage limitations. Since they are guaranteed, the minimum nonforfeiture benefits of indexed products are covered by the model act. However, the coverage limitations for the indexed features have not been tested. For example, it is not clear whether, upon the insolvency of a company selling indexed products, the guaranties tied to an index would be subject to the limitations of Model Act section 3.B.(2)(c).

Risks Assumed by Insurers

Insurers have assumed investment risk and the risk associated with mortality and surrender differing from pricing expectations.

Investment Risk

Analyzing the investment risk to insurers can be completed by separately considering “the investment risk assumed by the insurer from the contract owner” and “the management of that risk”. These are two fundamentally distinct concepts.

Investment Risk Assumed by the Insurer

Many of the EIIP investment risks assumed by the insurer are similar to the risk associated with traditional fixed insurance products. The investment risks are due to failure of the investments to earn the expected yield, credit and default risk, and disintermediation risk.

In addition to these traditional risks, EIIPs also have investment risk related to the equity indexed obligation.

Insurers are obligated by guaranties in EIIPs to at least credit the guaranteed interest rate (usually 3%), and the obligations can range to a high which may be unbounded. The performance of the S&P 500 equity index from 1995 through late 1997, for example, approached a 30% annual rate of return. The insurer must deliver whatever the equity formula dictates.

In contrast, the ultimate interest rate guaranteed on fixed annuities is commonly 3%. Insurers often limit higher interest rate guaranties on fixed annuities to only one year.

In one respect, however, the investment risk of equity indexed and fixed annuities is similar. Both are subject to disintermediation risk. The disintermediation risk of fixed annuities is well known; rising market interest rates induce surrenders as contract owners seek higher yielding alternatives, and insurers must pay these surrenders by selling their fixed income securities at depressed market values.

Disintermediation risk is also present for equity indexed insurance products. Although it has not been experienced since equity indexed annuities were introduced, the insurer's risk from increased contract owner surrenders must be considered.

EIIPs would have the same risk from rising interest rates as non-indexed insurance products. As interest rates increase, contract owners are incited to surrender their current insurance contract and purchase a new contract with higher interest rates. Because of the guaranteed values, the risk of liquidating investments at depressed market values is the responsibility of the insurer.

EIIPs also have a second source of disintermediation risk. Because rising interest rates often are accompanied or perhaps caused by a decreasing stock market it is reasonable to anticipate that many EIIP contract owners will anticipate poor future EIIP returns, resulting in increased surrenders. Again, because of the guaranteed floor values they are able to surrender their contracts with minimal loss and move their funds elsewhere.

Falling equity markets also depress the call option prices typically used to hedge equity indexed obligations (to the extent these call options are liquid and can be sold).

Equity indexed products can increase investment risk in other ways. Although they are under no legal obligation to do so, most insurers choose to “hedge” the equity risk through the purchase or replication of call options. Because there are only a small number of financial institutions providing over-the-counter calls tailored to these products, a significant default risk inevitably builds up, especially considering that these similar institutions may jointly suffer economic difficulties from the same underlying causes.

There is a different type of risk if, on the other hand, an insurer chooses to manufacture the desired option in-house through option replication. These are complicated schemes which demand good record keeping and constant attention. Perhaps because of turbulent markets, or perhaps because of inexperience in this sophisticated field, the insurer may suffer an inability to adequately replicate the desired option and must pay the promised equity-related interest from company surplus.

Insurers’ investment risk with respect to variable insurance products is far lower than with equity indexed and other types of fixed insurance products. Investment returns are passed through to variable contract owners, including any losses resulting from asset defaults. Additionally, variable insurance products have no disintermediation risk.

Management of Investment Risk by Insurers

The vast majority of EIIPs have been designed to be general account products. The assets purchased with funds from the sale of equity indexed products are commingled with assets purchased with funds from the sale of all other general account products to support all general account liabilities. There are generally no legally segregated pools of assets which support equity indexed obligations.

As identified in the discussion of the Appointed Actuary Statement of Asset Adequacy, insurers have generally attempted to hedge insurance products. Assets purchased to provide funds for the guaranties are generally invested in fixed income securities, similar to the assets used to back non-indexed insurance products.

Equity indexed liabilities are generally hedged with a call option on the equity index. Hedging is prudent because insurers typically have no offsetting general account liabilities, i.e., liabilities which decrease when the equity market increases. If such offsetting liabilities did exist, hedging would be less common because asset-liability management is often conducted on a company-wide basis.

In hedging the equity indexed obligations, the insurer considers similar investment issues to those considered in analyzing any investment. These include counter-party risk of default, the term to

maturity, and liquidity of the asset (in the event that policy surrenders or withdrawals leave the insurer “over-hedged”).

The call option on the equity index is usually obtained in one of three ways by an insurer; purchase an exchange-traded option; purchase a custom option “over the counter” from a financial institution; or manufacture the option via its own trading using a technique known as “option replication”.

Exchange-traded options are standardized and are available with adequate liquidity and variety only for short durations. They are therefore unsuitable for hedging most equity indexed products.

Longer term custom options are available from a variety of financial institutions. Because they can be manufactured to the insurer’s specifications, they can exactly match the term and equity indexed formula used by the equity indexed insurance product. However, these custom options have disadvantages because they usually are not available in small amounts, have counterparty risk (i.e., risk of default from the issuing financial institution), and they are not readily tradable. In addition, some companies believe that the assumptions used by the institutions to price longer term options make them expensive relative to option replication.

Option replication is an alternative to purchasing an option. Through option replication the insurer itself manufactures the call option needed to hedge its liabilities. It does so by following a trading strategy: which will result in the company owning the amount of index equity needed at expiration to cover the liability; and which does so at a cost which, if market volatility and interest rates remain stable, is expected to approximate what it would have cost to purchase the option at the outset.

Mortality and Lapse Risks

The mortality risk associated with EIIPs is comparable to the risk associated with non-indexed insurance products. The guaranteed mortality rates for life products or the guaranteed purchase rates for annuities are generally the same as in other insurance products. The presence of an equity indexed obligation in the insurance product design does not change the mortality risk associated with the insurance contract.

The risk associated with lapse rates differing from pricing expectations is also similar to the risk associated with non-indexed insurance products. As with other products, if lapses are higher than expected in early years, then the acquisition costs may not be recovered in full.

EIIPs do have an additional risk associated with mortality or lapse rates differing from their expected level. This is due to the possibility of over or under hedging the index risk.

Additionally, many EIIPs have mortality risk associated with immediately vesting the equity linked participation upon death.

Marketing of EIIPs

An area of great concern when the securities status of a product is considered is the methods utilized in marketing the product. While such issues are not strictly actuarial in nature, the Academy EIP Task Force was asked by the NAIC to examine marketing and disclosure issues relative to EIIPs. The Academy EIP Task Force has developed recommended guidelines that could be incorporated in new model regulations or modifications of existing model regulations to address these issues. The underlying goal of the Academy EIP Task Force recommendations is to provide consumers with clear, accurate and full information which will foster understanding of these products and how they work, and to set appropriate expectations for consumers on how these products function.

To achieve this end, the Academy EIP Task Force recommended consistency with existing NAIC Model Rules Governing the Advertising of Life Insurance (including annuity products), NAIC Model Life Disclosure Regulation, and as consistent as possible with NAIC Annuity Disclosure and Sales Illustration Model Regulation's as they are adopted.

The Academy EIP Task Force has recommended that disclosure of all fully guaranteed benefits and values and all guaranteed parameters related to the non-guaranteed equity indexed design be required. Disclosure of total amounts of non-guaranteed elements of the equity indexed design was recommended as optional. The Academy EIP Task Force recognizes that many options exist for disclosing values to consumers. Every option was found to have desirable features as well as drawbacks; therefore, the Academy EIP Task Force recommended that all such options should be permitted.

To ensure that both the negatives and positives of product features be described to consumers, the Academy EIP Task Force recommended that any marketing or disclosure material regarding non-guaranteed elements should provide consumers with a balanced view of the policy provisions inherent in the equity indexed design through the use of balancing language.

Finally, the Academy EIP Task Force recommended that annual reports be sent to contract owners.

A copy of this section of the Academy proposal to the NAIC is enclosed in Appendix C.

APPENDIX A: GENERAL DESCRIPTION OF EQUITY INDEXED PRODUCTS

EQUITY INDEXED PRODUCT DESCRIPTION

The following pages provide general descriptions and design choices for equity indexed deferred annuities, equity indexed immediate annuities and equity indexed life products. Also shown are product feature comparisons for current equity indexed annuities.

General Description of an Equity Indexed Deferred Annuity

Equity indexed deferred annuities (EIDA) are deferred annuity products that tie all or a portion of the benefits payable to the performance of an external index. These annuities can contain all other features of fixed deferred annuities. EIDAs have come to be described in terms of the length of their index-based interest cycle, type of index-based interest calculation, index used, usage of averaging of index values, method of converting the amount of index change into an interest rate, the method of crediting excess interest, and the end-of-term return guaranty. Some examples are: (a) 7 year, point-to-point, based on the S&P 500, using 6 month index averaging, with 80% participation, and a guaranty of 100% accumulating at 3% or (b) 8 year, annual ratchet, based on the NASDAQ, using year-end index values, with 100% participation minus a 2.00% spread, and a guaranty of 90% accumulating at 3%. Other characteristics such as flexibility of premium payment, vesting of interest credits, cash value profile, use of a market value adjustment, whether the annuity is part of a broader product, etc. could also be identified.

Design Choices in an Equity Indexed Deferred Annuity

Equity indexed deferred annuities can take many forms and are a combination of many separate design components. A key concept in evaluating various product designs is that no design is inherently financially superior to any other design. If all other characteristics of two products are identical, i.e., expenses, lapses, cash values, fixed investment yield, profit margin, etc., then the two products will spend the same amount on hedging cost and will provide equivalent value, although they may have different participation rates as a reflection of the design differences. What will differ is which product will produce better benefits under a specific set of circumstances; however, the call option market will have priced the various possibilities such that equivalent value is available under all designs. The design choices currently being used are described below:

Index Term Period

The index term period is the period over which equity index benefits are calculated and at the end of which a guaranteed return is provided. Typically, the full contract value is available without surrender charges at the end of a term. Commonly, each term is followed by another index term period. The contract value at the beginning of each index term period is set equal to the greater of the equity index benefit and the guaranteed minimum benefit at the end of the previous period. Some contracts offer several index term periods from which to choose and in those cases different terms can be chosen at the end of each term. Usual index term periods are from one to ten years.

Interest Calculation Methods

There are many different interest calculation methods; however, they generally fall into several families of designs and blends of the families:

Point-to-point methods credit interest as a portion of the percentage growth in the underlying index from the beginning of the term to the end of the term.

Ladder methods credit interest as a portion of the percentage growth in the underlying index from the beginning of the term to the end of the term with the additional guaranty that the recognized final index value will not fall below a specified index level if the index reached that level at specified points during the term. One or more “rungs” of a ladder may be specified. Measurements are typically done on anniversaries, but a more frequent basis is possible.

High water methods credit interest as a portion of the percentage growth in the underlying index from the beginning of the term to the highest value the index has achieved at specified measurement points up to the end of the term. Typically, these measurement points are the anniversaries in the contract, but they could occur with greater frequency. Each of these measurement points could use some averaging technique. The high water method also is sometimes referred to as the discrete lookback method, in recognition of the type of call option utilized to hedge it.

Low water methods credit interest as a portion of the percentage growth in the underlying index from the lowest value the index has achieved at specified measurement points during the term to the index value at the end of the term. Typically, these measurement points are the anniversaries in the contract, but they could occur with greater frequency. Each of these measurement points could use some averaging technique. The low water method also is sometimes referred to as the discrete lookforward method, in recognition of the type of call option utilized to hedge it.

Ratchet designs credit index-based interest to the current contract value periodically throughout the term. The following variations of the design are used:

Method of accumulation. A compound ratchet applies the index-based interest rate to the current contract value at the time of the crediting. A simple ratchet applies the index-based interest rate to the premium minus cumulative withdrawals at the time of the crediting.

Frequency of accumulation. Most ratchets operate annually; however, less frequent application is possible.

Length of guaranty of index change recognition. The current participation rate, spread charge, or cap can be guarantied for the entire term, only for the current interest crediting period, or for some intermediate period. If the guaranty is only for the current interest crediting period, a lesser guaranty commonly is provided for the balance of the term and subsequent terms.

Minimum guaranteed interest. For each interest crediting period, there is a specified minimum guaranteed interest rate, which generally does not vary. Typically, this is 0%, although a higher interest rate is sometimes used.

Equity Index Used

Any published index may be used, provided there are no licensing restrictions. Also, insurers can construct their own indices. The choice of indices is influenced by the availability of hedging instruments. Equity indices generally reflect the movement in the price level of the underlying stocks and do not include value growth due to dividend payments. Most contracts in the U.S. are based upon the S&P 500 Index, both because it is one of the indices most easily recognized by potential customers and because the call options needed to hedge the risk are readily available and liquid.

Index Averaging Methods

The simplest index measurement uses the index value of a single day; however, various averages of index values are sometimes used in order to reduce the volatility of the index increase measurement or to moderate the value credited to the annuity contract. Averaging techniques are characterized by the length of the averaging period and the frequency of the measurements within the period. Contracts which use averaging techniques are often referred to as having an Asian end or an Asian beginning, references to nomenclature used in option hedges:

Short term averaging may be used at the end of each contract year, and sometimes at the beginning of the contract, in order to reduce the volatility of the index measurement. Daily averaging over periods of 30 or 60 days might be used.

Long term averaging may be used at the end of a multi-year point-to-point benefit determination, e.g., when the index benefit is determined solely upon the change in the index from the beginning of the index term period to the end of the index term period, which could be up to ten years. Such averaging might be over a period of 2 to 24 months and commonly might use the average of monthly indices, although daily averaging could be used. This type of average provides some comfort to the purchaser that the benefit determination will not be based upon a relative low-point value of a single day, and it additionally produces a less expensive benefit which could support a higher participation rate.

Annual averaging of index values within each year for ratchet designs is used to reduce the volatility in the interest credited to the contract. Another result is that a nominally higher portion of the calculated index increase rate is reflected in the interest rate. Methods used are daily averaging, monthly averaging, and quarterly averaging. These methods reflect on average half to slightly more than half of the annual index increase percentage; however, the portion will vary considerably from year to year depending upon the profile of the index volatility during the year.

Method of Adjusting the Index Increase Percentage

The index-based interest crediting rate is some portion of the increase in the index and this adjustment is accomplished through the use of a participation rate, a spread deduction, a cap, or a combination of the methods:

Participation Rate is a multiplier applied to the percentage increase in the index in order to determine the index-based interest rate. Participation rates are dependent upon interest rates and call option costs and, consequently, are determined separately at the beginning of each period during which they are guaranteed. The highest participation rates are for point-to-point products and lowest for ratchet products.

Spread Deduction is a deduction from the percentage increase in the index in the calculation of index-based interest.

Benefit Cap is a maximum applied to either the annual or the cumulative index-based interest rate.

Guaranty Period for the Method of Adjusting the Index Increase Percentage

The participation rate, spread deduction, and cap can be guaranteed for any length of time; however, they are generally guaranteed at their current level either annually or for each index term period. If the current guaranty is for less than the full term, there often is a lower guaranty for the balance of the term and for subsequent terms.

Fixed Return Guaranty

The annuities guaranty at least a return of premium at the end of the index term period and generally an additional amount. The amount of guaranty is generally a percentage of the consideration applied at the beginning of the period with accumulation at a specified rate of interest. The minimum is the Standard Nonforfeiture Law minimum, i. e., 90% of premium accumulated at 3% for single premium contracts and 65% of first year premium and 87.5% of subsequent premium for flexible premium contracts. The most common guaranties are 90% accumulated at 3% and 100% accumulated at 3% or a higher rate.

Generally, the fixed return guaranty serves as a minimum guaranty against which the premium plus index-based interest is compared. Another design is to provide the index-based interest in addition to the guaranty.

There are three distinct manners in which the minimum guaranty is continued into the second and later index term periods. The lowest value is provided if the minimum required guaranty is continued as 3 percent compounding without interruption. A higher value generally is provided if each index term reinitializes the guaranteed value at the greater of the guaranty at the end of the previous term and 90 percent of the amount of the contract value at the end of that term. The highest value is provided if the reinitialization is at the greater of the guaranty at the end of the previous term and the contract value at the end of that term period minus 10 percent of the initial premium paid.

Time of Crediting Interest

Index-based interest is credited to the contract value either when it is calculated or at the end of the term. Interest in point-to-point contracts invariably is credited at the end of the term because its amount is unknown until then. Interest in other types of interest calculation methods is credited to the contract value at the time it is determined, generally annually, if the cash surrender value is a percentage of the contract value; but it is credited either annually or at the end of the term if the cash surrender values are determined as a percentage of the guaranteed return.

Vesting of Index-Based Interest

Index-based interest which is credited prior to the end of a term may be subject to vesting, which is the percentage of the interest which is available for recognition in the calculation of cash surrender values. The vested percentage generally increases annually and reaches 100% at the end of the term.

Cash Values

There are several cash surrender value designs:

Contract Value Minus a Percentage Surrender Charge. The percentage surrender charge generally is applied to the current contract value, although it sometimes is applied to the premium. The contract value would recognize any reductions due to vesting. The pattern generally repeats with the beginning of each index term period.

Guaranteed Value Minus a Percentage Surrender Charge. If the guaranteed value is larger than the minimum required by the Standard Nonforfeiture Law, the cash surrender value might be the guaranteed value minus a percentage surrender charge.

Guaranteed Value. If the guaranteed value equals the minimum required by the Standard Nonforfeiture Law, the cash surrender value might be the guaranteed value.

Imputed Ultimate Annual Returns sometimes are used to calculate cash values. In this approach the cumulative index-based interest return since the beginning of the index term is treated as if it was the return for the entire term and it is translated into an imputed annual return over the number of years in the full term. This understated annual return is then reduced by a spread deduction and the result is then accumulated for the number of years that have actually elapsed.

No Cash Surrender Value could be available, but this would be possible only within a group contract. Nonforfeiture values are required at all times under individual contracts if they are available at any time.

Free Withdrawals

Partial withdrawals or surrender without surrender charges or otherwise reduced values is available under various circumstances:

End of Term. Full contract values are customarily available for a 30 to 45 day window at the end of each index term period. The window either precedes or follows the end of the term.

Free Annual Withdrawals. Many contracts annually allow the withdrawal of a specified percentage, such as 10%, of the contract value or premium at full or vested contract value without the assessment of a surrender charge. The free withdrawal may be unavailable in the first year of the contract and may be limited in other ways, such as one per contract year or once per each running year. If the contract does not credit interest until the end of the term, the amount withdrawn might be ineligible for index-based interest credits.

Required Minimum Distributions. Withdrawals required to satisfy laws and regulations on tax-qualified plans often are allowed without surrender charges.

Illness Waivers. Nursing home waivers, which permit free withdrawals in the event of confinement in a nursing home, and terminal illness waivers, which permit free withdrawals when death is diagnosed as being imminent, are frequently included in the contracts.

Policy Loans

Policy loans are generally not offered because of the flexibility provided by the withdrawal provisions. In some cases policy loans are provided for because of the requirements for 403(b) plans.

Minimum Cash Surrender Values

The minimum cash surrender value is determined as the amount specified under the Standard Nonforfeiture Law. This is 90% of the premium accumulated at 3% for single premium contracts and 65% of first year premium and 87.5% of subsequent premium for flexible premium contracts.

Death Benefits

Several death benefit designs are possible:

Full Contract Value is the most common death benefit. For contracts with annual index-based interest crediting, this will be the contract value on the most recent anniversary. For contracts in which interest is not credited until the end of the term, an interim interest is credited as if the most recent anniversary prior to the date of death was the end of the term. Generally, vesting is recognized at 100% in the calculation of the death benefit. As a variant of either of these designs, a calculation could be made to determine the benefit based upon the index value as the date of death rather than as of the most recent anniversary.

Guaranteed Value could be the death benefit. This is uncommon but could occur in contracts where the cash surrender value is the guaranteed value minus a percentage surrender charge.

Specified Percentage of Premium could be the death benefit. This could occur if the cash surrender value is the Standard Nonforfeiture Law minimum or if there is no cash surrender value.

Frequency of Premiums

Contracts are available both as single premium annuities and flexible premium annuities.

Generally, each payment under a flexible premium annuity is treated in the same fashion as a single premium, namely, it establishes the beginning of an index term period; however, it is possible to accumulate premiums in a daily interest account during a contribution window until a sufficiently large amount has been collected or until the window closes.

A contribution window is the longest possible period that a premium has to remain in a daily interest account before index participation begins. It can be a month, a quarter, a year, or conceivably longer. At the end of the contribution window, all of the accumulated premium in the daily interest account becomes one single payment which is swept into an equity indexed account (viewed as a “bucket”).

The number of equity indexed buckets depends on whether contribution windows are used, the length of the contribution window, and length of the index term period. The longer the contribution window is, the fewer buckets there are. The shorter the index term period, the fewer buckets there are.

Premiums received during a contribution window accumulate interest in the daily interest account. At a minimum, the interest rate credited in this account is the contractual guaranteed minimum interest rate. Higher interest rate may be credited by companies based on their current credited rates on fixed products.

Use of a Separate Account

Almost all contracts are supported by assets carried in the general account of the insurer. Some contracts utilize a separate account for reasons unrelated to the equity index feature, such as the use of a market value adjustment formula.

Choices at the End of a Term

Most contracts provide several choices at the end of each index term, although some provide for an automatic continuation into either another index term or into a fixed annuity. Generally the choices are as follows:

Renew for Another Term. The renewal term is selected from among the term lengths offered in the contract. The amount applied to begin the new term is the amount of the contract value at the end of the term which just ended. The participation rate, spread deduction, or cap is redetermined for the new term. The surrender charges generally are reinitiated for the term.

Continue as a Fixed Annuity. The initial amount is the amount of the contract value at the end of the term which just ended.

Make Withdrawals. Part or all of the contract value can generally be withdrawn without a surrender charge.

Annuitization Options

Most contracts offer only the standard options available with fixed annuities; however, equity index based annuitization options can be offered.

Contract Structure

The equity indexed annuity feature is available in various combinations with other annuity alternatives:

Stand Alone. The equity indexed annuity is the totality of the contract. There might be several choices of index term period offered.

Combined with Fixed Alternatives. The contract might allow allocations and switching between equity indexed and fixed alternatives at the end of each term.

Within a Variable Annuity. The equity indexed annuity might be an alternative within a variable annuity contract.

Inclusion of Common Fixed Annuity Designs

The equity indexed annuity is essentially a fixed annuity with a different way of determining the credited interest rate; consequently, equity indexed annuities can contain any feature which might be found in a traditional fixed annuity. Current designs include bonus interest rates, two-tier structures, and market value adjustments.

Frequency of Issue

Contracts generally are issued on a weekly or bi-weekly basis in order to be able to combine larger amounts of premium for the efficient purchase of hedging options:

General Description of an Equity Indexed Immediate Annuity

Equity indexed immediate annuities (EIIA) are immediate annuities that tie all or a portion of the benefits payable to the performance of an external index. These annuities can contain all other features of fixed immediate annuities. EIAs are new to the market and currently show only limited designs, in contrast to equity indexed deferred annuities which are offered by many companies and reflect numerous designs. This description is primarily reflective of currently available products and will need to be revised when more products are available and additional design creativity has been brought to the market. An EIIA can be described in terms of the type of annuity payout, assumed interest rate, minimum payment guaranties, index used, usage of averaging of index values, participation rate, and length of the participation rate guaranty. Some examples are: (a) life annuity based on a 3% assumed interest rate with payments never below the initial payment, based on the S&P 500 using annual index values, with 80% participation guarantied for 5 years or (b) 10 year certain annuity based on a 4% assumed interest rate with payments never below the previous payment, based on the S&P 500 using annual index values, with 90% participation guarantied for 7 years.

Design Choices in an Equity Indexed Immediate Annuity

Equity indexed immediate annuities can take many forms and are a combination of many separate design components. A key concept in evaluating various product designs is that no design is inherently financially superior to any other design. If all other characteristics of two products are identical, i.e., expenses, mortality, fixed investment yield, assumed interest rate, profit margin, etc., then the two products will spend the same amount on hedging cost and will provide equivalent value, although they may have different participation rates as a reflection of the design differences. What will differ is which product will produce better benefits under a specific set of circumstances; however, the call option market will have priced the various possibilities such that equivalent value is available under all designs. The important design elements and some of the possible design choices are described below:

Assumed Interest Rate

The initial annuity benefit reflects an assumed interest rate, which the insurer may allow to be selected by the annuitant. The assumed interest rate also serves as the required interest in the calculation of equity index adjusted annuity payments. Equity index based interest in excess of the assumed interest rate produces an increase in the annuity payment and interest below the rate produces a decrease, in the absence of any guaranteed payment levels.

Minimum Payment Guaranty

There are several types of payment level guaranties which can be provided with the annuity payments:

Initial Payment Amount guaranties provide that any payment will be no less than the initial annuity payment. This is analogous to a point-to-point benefit in a deferred equity indexed annuity.

Previous Payment Amount guaranties provide that any payment will be no less than the previous annuity payment. This is analogous to a high water benefit in a deferred equity indexed annuity.

Ratchet Payment guaranties provide an increase over the most recent annuity payment if equity index based interest exceeds the assumed interest rate. This is analogous to a ratchet benefit in a deferred equity indexed annuity.

Frequency of Annuity Amount Change

The annuity amount could be changed as often as the payments are made; however, annual adjustments may be the most practical frequency, regardless of the frequency of the annuity payments.

Equity Index Used

Any published index may be used, provided there are no licensing restrictions. Also, insurers can construct their own indices. The choice of indices is influenced by the availability of hedging instruments. Equity indices generally reflect the movement in the price level of the underlying stocks and do not include value growth due to dividend payments. Most contracts in the U.S. are

based upon the S&P 500 Index, both because it is one of the indices most easily recognized by potential customers and because the call options needed to hedge the risk are readily available and liquid.

Index Averaging Methods

The simplest index measurement uses the index value of a single day; however, various averages of index values could be used in order to reduce the volatility of the index increase measurement or to moderate the change in the annuity payment.

Participation Rate

The index-based interest rate used in the determination of annuity payment amounts is some portion, called the participation rate, of the increase in the index over the period being measured. Participation rates are dependent upon interest rates and call option costs and, consequently, are determined separately at the beginning of each period during which they are guaranteed. The highest participation rates are for initial payment amount guarantees and lowest for ratchet guarantees.

Participation Rate Guaranty Period

The participation rate can be guaranteed for any length of time; however, it is generally guaranteed for a specified number of years, at which time it would be guaranteed at a newly determined level for another period of years. There may be a minimum participation rate guaranty for these subsequent periods.

Use of a Separate Account

The assets are held in the general account unless there is some design component, independent of the equity index feature, which would suggest use of a separate account.

Contract Structure

The equity indexed immediate annuity feature can be combined with other annuity alternatives:

Stand Alone. The equity indexed immediate annuity is the totality of the contract.

Combined with Fixed Alternatives. The contract might allow allocations between equity indexed and fixed alternatives.

Settlement Option. The equity indexed immediate annuity might be a payout alternative within an annuity which itself may or may not have equity index features.

Inclusion of Common Fixed Annuity Designs

The equity indexed immediate annuity is essentially a fixed immediate annuity with a different way of determining the annuity payments; consequently, equity indexed immediate annuities can contain any features which might be found in a traditional fixed immediate annuity.

General Description of an Equity Indexed Life Product

Equity indexed life products are life insurance products that tie all or a portion of the benefits payable to the performance of an external index. Equity indexed life products (EILPs) can take the form of a single premium, fixed premium or flexible premium life product. These products can contain all other features of a regular life counterpart with one exception — the credited interest is determined retrospectively based on the performance of an external index. Like equity indexed annuities (EIAs), the excess interest, or credited interest less the minimum guaranteed interest, on EILPs can be described in terms of the length of the index-based interest cycle, type of index-based interest calculation, index used, index participation, usage of averaging of index values, method of converting the amount of index change into an interest rate. Unlike EIAs, most EILPs would have smaller size premiums and would involve periodic deductions from the policyholder fund, such as premium loads, monthly loads and mortality charges.

Design Choices in an Equity Indexed Life Product

The equity index concept can be applied to any life products. The products currently available in the market are universal life products. Therefore, this document focuses on the design choices of an equity indexed universal life product.

An equity indexed universal life product can be viewed as a universal life product with at least one equity indexed account in addition to a daily interest account. In theory, each premium can be treated like a single premium. The periodic premiums can be viewed as a series of single premiums; and hedges can be purchased on each one of these premiums. However, options cannot be purchased in small amounts. Premiums need to be bundled to gain appropriate size for purchasing hedges. This means that the equity index participation may not begin immediately when the premium is received. The equity index benefits are constructed periodically, coinciding with the option purchase program. Premiums received at the time options are purchased will have index participation immediately. Premiums received at other times will have index participation deferred. The mechanism required to accumulate premiums during the interim period between option purchase dates is called a contribution window or contribution period.

Contribution Window

A contribution window is the longest possible period that a premium has to remain in a daily interest account before index participation begins. It can be a month, a year or a period of several years. Insurance companies may limit the issue dates of EILPs so that the policy start dates coincides with the start of a contribution window. At the end of the contribution window, all or a portion of the accumulated premium in the daily interest account becomes one single tranche and this tranche is swept into an equity indexed account (viewed as a “bucket”). Once it is swept into an equity indexed account, index participation begins. Therefore, at the end of each contribution window, a “bucket” is formed.

Index Term Period

The index term period is the period over which equity index benefits in an equity indexed bucket are calculated. At the end of the index term period of an equity indexed bucket, the equity index benefits will be calculated and credited to the bucket. The index benefits will be no less than the guaranteed minimum interest rate. Funds in that bucket are then rolled into a new equity indexed bucket and combined with contributions from the most recent contribution window and receive a new index participation rate.

The index term period can be any length, but one year is most common for flexible premium products. However, it is possible to have buckets of decreasing length to cover the period from the end of a contribution window to the next policy anniversary. Multi year index periods are typical for single premium products.

Number of Equity Indexed Buckets

The number of equity indexed buckets on an EILP depends on the length of the contribution window and the index term period. The longer the contribution window is, the fewer buckets there are. The shorter the index term period, the fewer buckets there are. For an EILP that accepts flexible premiums, the number of equity indexed buckets on a product can be calculated by multiplying the number of contribution windows in a year by the length of the index term period in years. For example, if there are quarterly contribution windows (i.e. the premiums are swept into an equity indexed bucket once every quarter) and the index term period for each bucket is five years, there will be twenty equity indexed buckets.

Due to the potential difficulties caused by numerous equity indexed buckets, flexible premium products currently available tend to have a one year index term period and a one year contribution window (or a one month contribution window) and hence, only one equity indexed bucket (or twelve equity indexed buckets).

Daily Interest Account

Premiums received during the contribution window accumulate interest in the daily interest account. At a minimum, the interest rate credited in this account is the contractual guaranteed minimum interest rate. A higher interest rate may be credited by companies based on their current credited rates on fixed products. Policy deductions, such as monthly loads, per unit loads, and cost of insurance charges, can be deducted from the daily interest account or from the equity indexed bucket(s).

Interest Calculation Methods

Potentially, there can be as many different interest calculation methods for the equity indexed buckets for EILPs as there are for EIAs. These methods can be categorized as follows:

Point-to-point methods credit interest as a portion of the percentage growth in the underlying index from the beginning of the term to the end of the term.

Ladder methods credit interest as a portion of the percentage growth in the underlying index from the beginning of the term to the end of the term with the additional guaranty that the recognized final index value will not fall below a specified index level if the index reached that level at specified points during the term. One or more “rungs” of a ladder may be specified. Measurements are typically done on anniversaries, but a more frequent basis is possible.

High water methods credit interest as a portion of the percentage growth in the underlying index from the beginning of the term to the highest value the index has achieved at specified measurement points up to the end of the term. Typically, these measurement points are the anniversaries in the contract, but they could occur with greater frequency.

Each of these measurement points could use some averaging technique. The high water method also is sometimes referred to as the discrete lookback method, in recognition of the type of call option utilized to hedge it.

Low water methods credit interest as a portion of the percentage growth in the underlying index from the lowest value the index has achieved at specified measurement points during the term to the index value at the end of the term. Typically, these measurement points are the anniversaries in the contract, but they could occur with greater frequency. Each of these measurement points could use some averaging technique. The low water method also is sometimes referred to as the discrete lookforward method, in recognition of the type of call option utilized to hedge it.

Ratchet designs credit index-based interest to the current contract value periodically throughout the term. The following variations of the design are used:

Method of accumulation. A compound ratchet applies the index-based interest rate to the current contract value at the time of the crediting. A simple ratchet applies the index-based interest rate to the premium minus cumulative withdrawals at the time of the crediting.

Frequency of accumulation. Most ratchets operate annually; however, less frequent application is possible.

Length of guaranty of index change recognition. The current participation rate, spread charge, or cap can be guarantied for the entire term, only for the current interest crediting period, or for some intermediate period. If the guaranty is only for the current interest crediting period, a lesser guaranty commonly is provided for the balance of the term and subsequent terms.

Minimum guarantied interest. For each interest crediting period, there is a specified minimum guarantied interest rate, which generally does not vary. Typically, this is 2.5% or 3% on EILPs although higher rates can be used.

Due to the smaller size premiums and monthly deductions associated with life products, they tend to have simpler designs on the calculation of index benefits. The point-to-point design tends to be prevalent, particularly for flexible premium products. For single premium life products, the calculation of index benefits can take on any of the designs mentioned above.

Equity Index Used

Any published index may be used, provided there are no licensing restrictions. Also, insurers can construct their own indices. The choice of indices is influenced by the availability of hedging instruments. Equity indices generally reflect the movement in the price level of the underlying stocks and do not include value growth due to dividend payments. Most contracts in the U.S. are based upon the S&P 500 Index, both because it is one of the indices most easily recognized by

potential customers and because the call options needed to hedge the risk are readily available and liquid.

Index Averaging Methods

The simplest index measurement uses the index value of a single day; however, various averages of index values are sometimes used in order to reduce the volatility of the index increase measurement or to moderate the value credited to the annuity contract. Averaging techniques are characterized by the length of the averaging period and the frequency of the measurements within the period. Contracts which use averaging techniques are often referred to as having an Asian end or an Asian beginning, references to nomenclature used in option hedge:.

Short term averaging may be used at the end of each contract year, and sometimes at the beginning of the contract, in order to reduce the volatility of the index measurement. Daily averaging over periods of 30 or 60 days might be used.

Long term averaging may be used at the end of a multi-year point-to-point benefit determination, e.g., when the index benefit is determined solely upon the change in the index from the beginning of the index term period to the end of the index term period, which could be up to ten years. Such averaging might be over a period of 2 to 24 months and commonly might use the average of monthly indices, although daily averaging could be used. This type of average provides some comfort to the purchaser that the benefit determination will not be based upon a relative low-point value of a single day, and it additionally produces a less expensive benefit which could support a higher participation rate.

Annual averaging of index values within each year for ratchet designs is used to reduce the volatility in the interest credited to the contract. Another result is that a nominally higher portion of the calculated index increase rate is reflected in the interest rate. Methods used are daily averaging, monthly averaging, and quarterly averaging. These methods reflect on average half to slightly more than half of the annual index increase percentage; however, the portion will vary considerably from year to year depending upon the profile of the index volatility during the year.

Due to the shorter index term period on EILPs, averaging tends to be short term, such as over a period of one to six months.

Method of Adjusting the Index Increase Percentage

The index-based interest crediting rate is some portion of the increase in the index and this adjustment is accomplished through the use of a participation rate, a spread deduction, a cap, or a combination of the methods:

Participation Rate is a multiplier applied to the percentage increase in the index in order to determine the index-based interest rate. Participation rates are dependent upon interest rates and call option costs and, consequently, are determined separately at the beginning of each period during which they are guaranteed. The highest participation rates are for point-to-point products and lowest for ratchet products.

Since the index term periods of the equity indexed buckets for EILPs tend to be shorter than those under EIAs, the participation rates are usually lower than those seen under EIAs, both on the guaranteed and current bases.

Spread Deduction is a deduction from the percentage increase in the index in the calculation of index-based interest.

Benefit Cap is a maximum applied to either the annual or the cumulative index-based interest rate.

Guaranty Period for the Method of Adjusting the Index Increase Percentage

The participation rate, spread deduction, and cap can be guaranteed for any length of time; however, they are generally guaranteed at their current level either annually or for each index term period.

Index Benefits for an Equity Indexed Bucket

At the end of the index term period of an equity indexed bucket, index benefits are calculated for that bucket by multiplying the index increase percentage by the value of that equity indexed bucket immediately before the calculation takes place.

Guaranteed Minimum Interest

EILPs generally have a guaranteed minimum interest rate specified in the contract. This rate applies to the daily interest account as well as the equity index buckets. This guaranteed minimum interest rate can be a fixed rate, such as 2.5% or 3%, or an indexed rate, such as 50% of the 90 day Treasury rate.

Contract Charges

The charges which are characteristic of a universal life contract are similarly applied to an EIL contract:

Premium Loads are assessed on premiums paid to cover state premium tax, DAC tax and sales related expenses. They are expressed as a percent of premiums and are deducted from premiums upon receipt.

Monthly Loads can be on a per policy and a per unit basis. They are deducted from the daily interest account or the equity indexed bucket(s) on monthiversaries.

Cost of Insurance charges are deducted from the daily interest account or the equity indexed bucket(s) on monthiversaries.

Partial Withdrawals

Partial withdrawals are allowed from the daily interest account or equity indexed bucket(s), usually subject to surrender charges.

Policy Loans

Policy loans are allowed on EILPs. The maximum loan available can be the entire cash value. Loans are made from the daily interest account or the equity indexed bucket(s). Transfers may be made from the equity indexed bucket(s) to the daily interest account before the withdrawals are processed.

The loan interest rate can be a fixed rate or a rate tied to an outside index or a rate declared by companies from time to time. The rate credited on the loan amount is the guaranteed minimum interest rate or a higher rate.

Transfer From Daily Interest Account To Equity Indexed Bucket

Transfers from the daily interest account to an equity indexed bucket occur at the end of a contribution window. All or a portion of the accumulated premium in the daily interest account is swept into an equity indexed bucket on that date. To the extent that there is more than one equity indexed bucket, the accumulated premium is swept into the equity indexed bucket with a start date coinciding with the transfer date.

Transfer From Equity Indexed Bucket To Daily Interest Account

Transfers from an equity indexed bucket to the daily interest account are usually not allowed, except to cover policy charges and loans from the daily interest account.

Under these exceptional circumstances, transfers are automatically made from the equity indexed buckets to the daily interest account. To the extent that there is more than one equity indexed bucket on the product, some convention, such as pro-rata, LIFO, or FIFO, needs to be established as to which equity indexed bucket will be drawn upon. The amounts on which the index benefits will be calculated at the end of the index term period of the equity indexed buckets affected are then reduced.

Death Benefit Options

Like regular universal life products, EILPs offer two death benefit options: level and increasing. However, EILPs differ from regular universal life products in that the “fund value” used in the calculation of death benefit can have the interest for the partial year preceding death calculated in one of the following ways:

At guaranteed minimum interest rate only: The index benefits of an equity indexed bucket at time of death will be calculated using only the guaranteed minimum interest rate taking into account the duration from the beginning of the equity indexed bucket to the day of death.

Using the method of calculating index benefits: The index benefits of an equity indexed bucket at time of death will be calculated using the method defined in the contract although the index term period used for the calculation is equal to the time elapsed from the beginning of an equity indexed bucket to the time of death.

Account Value

The account value of an EILP is equal to the value of the daily interest account plus the value(s) of the equity indexed bucket(s).

Cash Surrender Value

The cash surrender value of an EILP is equal to the account value less surrender charge.

Surrender Charge

Surrender charge scale of an EILP is similar to that of a regular universal life product. The surrender charge scale can be ten to twenty years long. It can be based on units, premiums, or a percent of fund value.

Use of a Separate Account

The assets are held in the general account unless there is some design component, independent of the equity index feature, which would suggest use of a separate account.

Frequency of Issue

Due to the existence of a contribution window and a daily interest account, EILPs can be issued every day, although companies may limit the issue dates of EILPs to the start of a contribution window.

APPENDIX B: CONTRACT FILING REQUIREMENTS

The purpose of establishing contract filing requirements for equity indexed products is to facilitate the regulator's understanding of these products and, thereby, expedite the review and approval process of such products. Since some of the proposed requirements are not actuarial in nature, the NAIC may wish to solicit input from industry and other professional groups regarding the proposals outlined below.

The contract filing requirements proposed in this document are primarily modeled after those stipulated in the NAIC Interest Indexed Annuity Model Regulation and the section on Interest-Indexed Universal Life Policies (Section 10) of the Universal Life Insurance Model Regulation, adjusted to reflect the characteristics unique to equity indexed annuity and life products, respectively.

The company can request the filing materials to be kept confidential by the insurance departments, where applicable.

The Academy's EIP Task Force proposed contract filing requirements are shown below.

I. Actuarial Memorandum

A. Description of the product

B. Description of the index used: Describe the external index used and the criteria for selecting a substitute index if the current index is no longer in existence or applicable. Advance notification should be provided to the insurance department on the substitute index, the rationale for replacing the existing index and the substitute index used for inforce contracts.

C. Description of how index-based benefits are calculated: Provide descriptions, complete with formula definitions, of how index-based benefits are calculated under level, up and down index scenarios. Provide a description, complete with an algorithm, if any, of how these index-based benefits are set initially at product launch, and how they are planned to be reset subsequent to product launch.

D. Demonstration of compliance with the applicable nonforfeiture requirements, if any.

E. Description of the reserving method, including a statement as to what method will be used to value the index-based benefits. Accepted methods are provided in the reserve section of this report.

F. Brief description of asset adequacy testing methodologies used to address product features unique to equity indexed annuity or life product, if applicable.

II. Advertising Materials

A. Advertising materials are defined in the "NAIC Model Rules Governing the Advertising for Life Insurance", which include illustrations. "Invitation to Contract" and "Invitation to Inquire" are defined in the Marketing Material and Disclosure section of this report.

B. Drafts of "Invitation to Contract" advertising materials should be provided with the product filing.

C. Drafts of "Invitation to Inquire" advertising materials need not be filed.

D. Any subsequent material changes to "Invitation to Contract" advertising materials should also be filed.

E. The guidelines above are subject to state specific requirements governing advertising materials. For example, some states require preapproval of advertising materials; other states do not require filing of any advertising materials.

III. Materials Provided by the Company to the Policyholder after the Sale of the Policy

A. Policy form and application: Policy form includes any policy data page, which is policy specific.

B. Sample of policy summary (also known as statement of cost and benefit information) or sample of illustration, as appropriate.

C. Sample of annual policyholder report (or a sample periodic statement to be provided to the policyholder). Items which must be included in such a report or statement are specified in the Marketing Material and Disclosure section of this report.

D. The guidelines above are subject to state specific requirements regarding the required filing of such materials.

IV. Hedging Policy

A. Description of hedging instruments, if any, which are planned to be acquired to fund the obligations inherent in the product.

B. Details concerning methods used to determine the amount and type of hedging instruments, if any, used to hedge the risks associated with the indexed obligations. When identifying the hedging instruments which will be acquired, information concerning type, maturity and strike price (if applicable) must be provided.

C. Description of the methods which will be used to determine the extent of rebalancing the portfolio supporting the product and the frequency of rebalancing.

D. Description of responsibilities within the company, i.e., who determines the hedging policy, and who has the authority to approve and who has the responsibility to carry out this policy.

E. Description of how the company handles the risks associated with purchasing hedging instruments. Such risks may include, but are not limited to:

1. Liquidity risk, which arises when there is limited ability to hedge, close out, or sell a financial risk position;
2. Credit risk associated with possible counterparty defaults;
3. Market risk due to fluctuations in market values of assets and liabilities
4. Pricing risk, arising from infrequently set product parameters relative to the cost of options that are yet to be purchased;
5. Legal risk associated with legal agreements with derivative dealers; and
6. Operations risk, arising from inadequate internal systems and control, human error, or management failure.

F. Details should be provided supporting any required reserve certifications regarding reasonableness of assumptions" or "reasonableness and consistency of assumptions".

G. If the reserving method is based upon the attainment of any "hedged as required" criteria, details should be provided as to how such criteria will be met.

V. Sample Policy Projections

The Task Force recommends that companies not be required to provide sample policy projections to all states. However, we recognize that a few states do impose such a requirement on all policy filings. In these situations, the Academy Task Force recommends that the index scenarios under which the projections are to be performed should be customized by the company to recognize the distinct design features of the product.

APPENDIX C: MARKETING MATERIAL AND DISCLOSURE

Part of the charge set forth to the American Academy of Actuaries by the NAIC was to examine marketing material and disclosure needs for equity indexed products. This report recommends guidelines for regulators in developing new model regulations and modifying existing model regulations to address these issues.

As regards the issue of ‘What is the responsibility of the actuary?’, this remains to be determined by the regulators.

I. Proposal for Recommended Guidelines to Regulators for Marketing Materials Used in the Sale of Equity Indexed Life and Annuity Products

For purposes of these Guidelines, it is recommended that the definition of "Non-guaranteed policy elements" in the Rules Governing the Advertising of Life Insurance be modified to include consideration of the Equity Index

A. Goals/Objectives:

1. Foster consumer education and understanding of equity indexed products.
2. Provide consumers with clear information about these products.
3. Be consistent with the NAIC Model Rules Governing the Advertising of Life Insurance (including annuity products) whose purpose is:

To set forth minimum standards and guidelines to assure a full and truthful disclosure to the public of all material and relevant information in the advertising of life insurance policies and annuity contracts.

B. Definitions:

1. "Invitation to inquire" is defined for these recommended guidelines as marketing material whose objective is to create a desire to learn more about the product and is limited to a brief description.
2. "Invitation to contract" is defined for these recommended guidelines as marketing material that is not an invitation to inquire.

C. Marketing Material:

1. It is recommended that any marketing material used which is an invitation to inquire or an invitation to contract consumers in the sale of equity indexed products be covered by the NAIC Model Rules Governing the Advertising of Life Insurance. These rules require that advertising material must:

- a. be truthful and not misleading in fact or by implication.
- b. be sufficiently complete and clear so as to avoid deception.
- c. not have the capacity or tendency to mislead or deceive.

Compliance of advertising material with the Rules is measured based on the overall impression.

D. Balancing Language:

- 1. It is recommended that any marketing material which is an invitation to contract and contains language regarding the non-guaranteed elements, provide consumers with a balanced view of the policy provisions inherent in the equity indexed design
- 2. The purpose of balancing language is to ensure that both the negatives and positives of product features are described for consumers. Section V. of this appendix offers some examples of balancing language. These examples are in no way an all-inclusive list of balancing language nor must the specific words be used.

II. Proposal for Recommended Guidelines to Regulators for Disclosures Used in the Sale of Equity Indexed Annuity Products

It is recommended that the Guidelines to Regulators for Marketing Materials also be applicable to disclosures.

A. Goals/Objectives:

- 1. Foster consumer education and understanding of equity indexed annuities.
- 2. Provide consumers with a clear explanation of how these products operate.
- 3. Set appropriate expectations on how these products function.
- 4. Be as neutral as possible with regard to policy design.
- 5. Be consistent with the proposed NAIC Annuity Disclosure Model Regulation (As revised at the April 30, 1997 Interim Meeting of the NAIC Life Disclosure Working Group) and the NAIC Model Rules Governing the Advertising of Life Insurance (including annuity products).
- 6. Be complementary to work done on equity indexed nonforfeiture and policy design.
- 7. Provide consumers with a balanced view of the advantages and disadvantages of the indexed policy provisions.

B. Disclosure of Guaranteed Benefits and Values, Including Guaranties within the Non-Guaranteed Equity Indexed Design:

1. Disclosure of all fully guaranteed benefits and values and all guaranteed parameters related to the non-guaranteed equity indexed design is required by the proposed NAIC Annuity Disclosure Model Regulation (As revised at the April 30, 1997 Interim Meeting of the NAIC Life Disclosure Working Group). This proposed Model Regulation applies to most group and individual annuity contracts and certificates including equity indexed annuities. It requires that applicants be given a disclosure document which has numerous disclosures about the annuity contract including the requirement of a description of the guaranteed and non-guaranteed elements of the contract, and their limitations, if any, and an explanation of how they operate.

C. Disclosure of Total Amounts of Non-Guaranteed Elements of the Equity Indexed Design:

1. It is recommended that disclosure of total amounts of non-guaranteed elements of the equity indexed design be optional. It is further recommended that if shown: it may be narrative or tabular, under single or multiple scenario(s) (e.g., historical, hypothetical, level, fluctuating) and under any index; the disclosure may be shown generically or may be personalized to the applicant as long as it is fully identified as to which method is used; and any projection period used must be such that the implications of going beyond the initial term of the product design are clearly disclosed to consumers.

2. Many options for disclosing values to consumers were reviewed including narrative versus tabular, single versus multiple scenarios, historical versus hypothetical, indices that were level versus fluctuating, and generic versus personalized. Every option had desirable features as well as drawbacks. Given the variety of today's and future equity indexed product designs and the number of different components that have to be considered, it was concluded that no one option can adequately capture the policy mechanics of all equity indexed product design variations. Therefore, it is recommended that all such options be permitted, subject to being supplemented by balancing language. This supports the needed flexibility in presenting total amounts of non-guaranteed elements in equity indexed designs and also ensures consumers have full and balanced information for their decision making process.

D. Balancing Language:

1. It is recommended that any disclosures containing language regarding the non-guaranteed elements provide consumers with a balanced view of the policy provisions inherent in the equity indexed design.

2. The purpose of balancing language is to ensure that both the negatives and positives of product features are described for consumers. Section V of this appendix offers some examples of balancing language. These examples are in no way an all-inclusive list of balancing language nor must the specific words be used.

III. Proposal for Recommended Guidelines to Regulators for Annual Reports for Equity Indexed Annuity Products

A. It is recommended that annual reports to consumers of equity indexed annuities be required.

B. It is recommended that such annual reports have to satisfy the NAIC Model Rules Governing the Advertising of Life Insurance.

C. It is further recommended that such annual reports, at a minimum, disclose the following values as of the annual report date:

1. Cash surrender value.
2. Account value.
3. Death benefit.
4. Contributions for the year.
5. Outstanding loans, if any.
6. Anything specific to the equity indexed design that affected the values during the year.

D. It is recommended that disclosure of the impact of changes in the index on current or future policy values be optional. Any disclosure of such impact must indicate whether the amount is locked-in or subject to diminution due to future changes in the index. If a future value is disclosed, the conditions that must be met to be eligible to receive the future benefit must be fully disclosed.

IV. RECOMMENDATIONS CONCERNING THE NAIC LIFE INSURANCE ILLUSTRATIONS MODEL REGULATION

A. Section 3 of the NAIC Life Insurance Illustration Model Regulation (Model) states, "This regulation applies to all group and individual life insurance policies and certificates..." Exceptions to this broad statement are made. However, there is no exception for equity indexed life insurance policies. Hence, insurers marketing these products face the challenge of interpreting the Model in an attempt to comply with its requirements. This entails making decisions as to the interpretation of several concepts including guaranteed and non-guaranteed elements, disciplined current scale, currently payable scale, illustrated scale and actual recent historical experience. In addition, some of the limitations contained in the Model may result in inadequate explanation of policy features. For example, the standard for supplemental illustrations may prohibit attempts to explain policy features such as caps on index increases. It is recommended that as a near term solution to the issue raised, regulators consider insurer adherence to the following recommendations be considered an acceptable interpretation of the Model when it is being applied to an equity indexed life insurance policy form. However, as the number of insurers marketing equity indexed life products increases and product variation increases, the NAIC should consider suitable modifications to the Model to

make it a more appropriate tool for regulating illustrations provided under equity indexed life insurance policies.

B. Applying the Model requires a decision as to which elements of the policy design are guaranteed and which are non-guaranteed. Equity indexed based benefits and interest credits may consist of guaranteed elements (e.g., underlying index) and non-guaranteed elements (e.g., changes in the value of the underlying index). It is recommended that the determination as to the guaranteed/non-guaranteed nature of a benefit of credit under an equity indexed life insurance policy be at the individual product feature level. A recommended definition of guaranteed elements and non-guaranteed elements is contained in the section of this report captioned “General Descriptions of Equity Indexed Products.” Application of these definitions may result in indexed benefits or indexed interest crediting rates being viewed as a combination of elements, some guaranteed and some non-guaranteed.

C. The definition of “currently payable scale” refers to a scale of “non-guaranteed elements.” The scale may consist of dollar amounts per unit, percentage rates or a formula that is based on both guaranteed and non-guaranteed elements that can only be evaluated at some future date. The formula may include policy design features that are guaranteed or non-guaranteed. It is recommended that the declaration of a formula with guaranteed and non-guaranteed elements be considered an acceptable currently payable scale.

D. The definition of “disciplined current scale” refers to “actual recent historical experience.” It is recommended that for purposes of the developing of the disciplined current scale, changes in the value of the underlying index should be based on long-term experience periods terminating near the date of termination of the disciplined current scale. Except in cases where the rules for determining the index value have changed, the procedure for determining the change in the value of the underlying index should not vary over time.

E. Section 7C of the Model requires that basic illustrations be provided on three bases: policy guaranties, the illustration scale, and on the basis reflecting certain specified modifications to non-guaranteed elements in the illustrated scale. It is recommended that an illustration of benefits and values on the third basis should reflect modifications to each non-guaranteed element separately.

F. When providing a supplemental illustration in accordance with Section 8 of the Model, it is recommended that each non-guaranteed element contained explicitly, or implicitly in the supplemental illustration be subject to the limitations contained in Section 8A(2) of the Model.

G. When preparing an in-force illustration in accordance with Section 10 of the Model, it is recommended that the in-force illustration reflect non-guaranteed elements as illustrated in the insurer’s current illustrated scale except for any elements which may have values “locked in” for a period of time.

H. The Model requires that inconsistencies between non-guaranteed elements illustrated in the in-force illustrations and illustrations for new policies must be disclosed in the actual certification required by Section 11. It is recommended that differences between the participation rates and /or spread deductions used in the illustrated scale for new issues and those used in-force illustrations

for similar policies, when based on inconsistent cost considerations, be disclosed in the annual certification.

V. EXAMPLES OF BALANCING LANGUAGE

The purpose of balancing language is to ensure that both the negatives and positives of product features are described for consumers. Following are some examples of balancing language. These examples are in no way an all-inclusive list of balancing language, nor must the specific words be used.

- A. To the extent that the index methodology uses averaging and it is advertised that protection is provided against downturns, it must also be disclosed that the method does not give full credit for an upturn.
- B. To the extent that the index methodology is based on multiple factors, then it must also be disclosed that comparisons of a single factor can be misleading.
- C. To the extent that any year to year index increases or volatility (hypothetical or historical) are disclosed, then it must also be disclosed that that performance is no indication as to future performance.
- D. To the extent that the index excludes dividends, such a fact should be disclosed.
- E. To the extent that early termination or the exercise of withdrawal rights may result in the loss of some or all of the benefit of any increases in the index, this must be disclosed.
- F. To the extent that the marketing material includes statements like "participate in the upside of the Index" or "participate in the upside without risk" then it must also be disclosed that there is a downside risk which can go to the guaranteed minimum level.