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## Introduction

In mid-June of 2015, the NAIC adopted Actuarial Guideline 49, officially titled “The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest.” The NAIC’s adoption culminated a process that consumed several years of elapsed time and literally thousands of hours of industry and regulator time. While the final work product is seen by many as a compromise between regulators and industry, and even between different factions of industry carriers, the reality is (as always) that the “devil is in the details.” The final version of Actuarial Guideline 49 answers many open questions, but others remain. In the aftermath of its adoption, the pervasive question is “What are the likely impacts of AG49?”

In this paper, we will summarize the major provisions of AG49 and consider their likely ramifications, both near-term and long-term, on products and the IUL industry as a whole.

## Rationale for AG49

Regulators (and the industry) acknowledge that the NAIC’s Life Insurance Model Regulation (Model Regulation #582) has governed IUL contracts since the Model’s adoption in 1995. However, that Model, which has been adopted in some form by 35 states, did not anticipate the popular emergence of products in which the policyholder’s benefits are linked to an external index. As a result, the Model’s provisions as to what future indexed cash values could be illustrated were unclear for IUL contracts. Similarly, guidance to the Illustration Actuary on how to test for compliance with the key illustration tests (Self-Supportedness and Lack of Lapse Supportedness) on IUL contracts was non-existent. Accordingly, industry practice reflected more and less conservative approaches. This lack of uniformity was troublesome to many regulators.

Complete uniformity has not been achieved with AG49, however. In the Background Section to the Guideline, the language reads, “In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates.” This can still be the case under AG49, as policy-specific caps and participation rates, as well as differences in AG49 calculation interpretation, can drive different illustrated index returns.

## Use of an Actuarial Guideline

In recent years, regulators have favored the use of Actuarial Guidelines as vehicles to rapidly implement new rules and standards. Actuarial Guidelines do not require the introduction of state-by-state legislation and adoption as a Model Regulation does. But, does an Actuarial Guideline have the same force of law as a Model Regulation does? Could an insurer choose not to adopt the AG49 standards on the basis that the standards are only “guidelines” and not law? From a pure legal standpoint, a persuasive argument could be made that a guideline has more room for legal interpretation than a statute. However, from a practical standpoint, guidelines become strict requirements (essentially equally powerful as a law) if a state regulator says they are. In the case of AG49, nearly all states will choose to enforce its requirements as if

it was statutory law, and penalize perceived violations of the Guideline. Interestingly, though, regulators chose to pursue the Model Regulation route in defining Indexed Annuity Illustration standards (which differ significantly from AG49 requirements), rather than the Actuarial Guideline route.

## Goals of AG49

As stated in AG49 itself, there are three primary goals of the Guideline:

- A. Providing guidance in determining a maximum illustrated index credited rate and an earned interest rate for the Disciplined Current Scale (DCS),
- B. Limiting the amount of policy loan leverage for so-called indexed (or “participating”) loans, and
- C. Requiring additional disclosures not required in non-indexed UL illustrations.

Each of these goals (and how AG49 addresses them) will be discussed in the remainder of this Paper. For now, it should be mentioned that each of these goals is targeted to correct what regulators (and others) perceive to be shortfalls in current IUL illustration practices, namely:

- A. Some companies use selective backcasting or index selection to project an overly optimistic future index crediting rate,
- B. Illustration actuaries have little guidance, and employ different levels of professional judgement, in testing for IUL illustration compliance, and
- C. The complexity of IUL contracts confuses applicants into not understanding the workings and volatility of potential IUL purchases.

There is some truth in each of these perceptions, however it can be noted that IUL carriers had begun converging around more similar backcasting approaches even before AG49’s adoption. To be clear, however, the backcasting approaches used by insurers have been applied independently to each index account, so that the “cherry-picking” of indexes was practiced. The adoption of AG49 provides new guidance to Illustration Actuaries, however, there are still numerous areas of professional judgement - for example, what kinds of sensitivity tests on index performance should be analyzed to become comfortable that the contract satisfies the required tests under a reasonably broad set of scenarios? Finally, there have been large differences in industry practice around what additional information should be shared with the applicant beyond the basic illustration, in order to help the potential buyer better understand how the IUL works. AG49 helps to standardize this.

The specific requirements of AG49 are discussed below.

## Benchmark Index Account

In order to meet the AG49 objective of defining a maximum illustrated index credited rate, the Guideline created the notion of a Benchmark Index Account (BIA). In simple terms, the BIA is a one-year point-to-point S&P 500 index account, using the S&P 500 price level only (no dividends on the underlying stocks), or the SPX, as the index is referred to. The BIA is assumed to be structured with an annual return cap, a 100%

participation rate, and a 0% annual floor. Not surprisingly, this type of one-year point-to-point S&P 500 index account is dominant in actual IUL offerings today. AG49 then defines a maximum illustrated annual index credited rate based upon a specific 25-year backcasting formula for the S&P 500 one-year point-to-point BIA.

Why is the BIA based on the S&P 500 one-year point-to-point return? Several reasons:

- A. This index account definition appears on nearly all IUL contracts, and attracts the highest percentage of premium,
- B. The S&P 500 is the most efficient index to hedge, leading to minor hedging differentiation by carrier, and
- C. The S&P 500 has a long performance history, which is important in completing the backcasting calculation for the maximum illustration credited rate.

The mechanics of the backcasting approach will be described in the next section, but one additional point can be made here. In completing the BIA backcasting calculation, if an IUL insurer offers a one-year point-to-point S&P 500 account, the current actual annual cap on that account must be used in the backcasting calculation. Because of this, two carriers with different current S&P 500 annual caps will calculate different maximum illustrated index credited rates. If an insurer does not offer an S&P 500 one-year point-to-point index account (admittedly a rarity today), the AG49 backcasting must be performed using a hypothetical BIA S&P 500 account with an annual cap established by the Illustration Actuary using actuarial judgement.

## Using Backcasting to Develop the Maximum Index Illustrated Credited Rate

The technique used to derive the maximum illustrated credited rate for a given calendar year under AG49 is a backcasting approach applied to the Benchmark Index Account (S&P 500 Point-to-Point). The use of backcasting approaches has been subject to criticism from some observers for many reasons, one of which is that a backwards look at historical performance fails to reflect that interest rates, caps and participation rates would have been different in the past than they are today. The AG49 backcasting approach represents a compromise between theory and practicality. Past index performance is overlaid against current index parameters in order to derive a maximum illustrated credited rate for a given calendar year, as follows.

- A. Begin by focusing on the 25-year period starting on December 31st of the calendar year that starts 66 years before the calendar year for which the maximum illustrated index credited rate is to be determined. This means that for determining the calendar year 2015 maximum illustrated index crediting rate, start with the S&P 500 Price Level Index (SPX) as of December 31, 1949.
- B. Determine the index growth (%) from December 31, 1949 to December 31, 1974, taking into account the current S&P 500 cap, floor, and participation rate.
- C. Solve for the level annual growth rate that would compound over 25 years to equal the same total growth as in B. above (this is called a geometric average annual rate of return). Record this figure.

- D. Advance the 25-year window in B. by one trading day, and calculate the geometric average of the resulting 25-year window, same as above.
- E. Continue advancing the 25-year window by one trading day and calculating each geometric average, until the 25-year period ends on December 31 of the calendar year immediately preceding the year for which the maximum illustrated index credited rate is being determined. (2014 for determining the 2015 maximum rate).
- F. Take the simple arithmetic average of all of the above geometric averages - note that there will be over 10,000 data points over which an arithmetic average is determined. The result of this calculation is the maximum illustrated index credited rate for any chosen index (S&P 500 or any other index).

For non-S&P 500 indexes, AG49 gives the Illustration Actuary (not the Responsible Company Officer) the authority to use judgement to determine an illustrated credited rate for such indices. Such judgement should recognize risk, return, and volatility characteristics of these other indexes. Given that no other guidance is provided, there is clearly some subjectivity involved in determining illustrated rates for non-S&P 500 accounts. However, illustrated rates on non-S&P 500 accounts still cannot exceed the rate determined above for the BIA.

Insurers will determine the maximum illustrated index credited rate on a calendar-year basis. AG49 allows insurers until March 31 of the current calendar year to update the maximum illustrated index crediting rate for that year.

There are some interesting points that emerge from the AG49 backcasting approach:

- A. Should the calculation be re-done (and a new maximum illustrated index rate be determined) if the insurer changes caps, floors, or participation rates for new business in the middle of a calendar year? The prevailing answer seems to be “yes.”
- B. These approaches apply to both new sales and to inforce illustrations. Quite possibly, a carrier may determine a different maximum illustrated index rate between new business and inforce business.
- C. The AG49 approach does not require carriers to reflect any “sequence of returns” variation in illustrations. With many IUL contracts, substantial differences in ultimate accumulations occur depending upon the order of annual index credits (e.g., a +10%, 0%, 5% crediting sequence generates materially different cash values than a 5%, 0%, +10% sequence) due to the timing of COI and other loads. AG49 permits a company to show only level illustrations of index crediting rates, as long as the level returns do not exceed the maximum permitted.
- D. Detailed calculation guidance may still be needed in the determination of the geometric averages above. For example, are there specific rules around how to calculate the averages when the 25-year period starts or ends on a weekend or holiday?

The above calculation of the maximum illustrated index credited rate will result in a figure that changes very slowly from calendar year to calendar year, unless significant changes in the current cap/participation rate/floor occur. Further, for the foreseeable future, the maximum illustrated index crediting calculation will be heavily influenced by S&P 500 performance in the 1970's, a period of flat stock market performance.

## Disciplined Current Scale

AG49 is focused on the data/information presented to a prospect in an IUL illustration, but there is one piece of guidance for the Illustration Actuary in performing the two certification tests under the NAIC Model - the Self-Support Test and the Lapse-Support Test. The Illustration Actuary must certify that a contract being illustrated passes the Self-Support Test and that the contract is not Lapse-Supported, in order for that policy form to be eligible to provide sales illustrations with non-guaranteed elements.

The Illustration Actuary develops a set of assumptions, called the Disciplined Current Scale (DCS), as the foundation for performing this testing. For IUL contracts, one of the gray areas has centered around what earned interest rate can be assumed as part of the DCS, especially when the insurer manages a hedging program for the IUL.

AG49 clarifies that element by stating that if an insurer conducts a hedging program for the IUL, the assumed earned interest rate for the DCS can equal, but not exceed, 145% of the general account net investment earnings rate (excluding hedges). No specific standard is mentioned in AG49 on how much of the index based interest must be hedged. Can a carrier who hedges only a small part of the index crediting rate be permitted to reflect the 145% factor?

This 145% limitation sparked spirited disagreement between parties in the drafting of AG49 - namely, how much yield pick-up can be associated with well-constructed hedges in an IUL program? To some, a 45% increase in overall earned rate due to hedging is a generous regulatory concession, while to others, it is a conservative and limiting restriction. Clearly, most carriers will continue to hedge their IUL policies and will use the maximum earned rate of 145% of the general account annual net earnings rate in their DCS.

## Policy Loans

Illustrations of “participating” policy loans were too controversial for regulators to ignore in AG49. Participating policy loans are IUL policy loans in which the loan collateral is assumed to be credited index-linked interest, while the policy loan is charged at a rate that is either fixed or linked to an external metric like Moody’s Corporate Bond Averages. In either case, some illustrations have depicted large, favorable index credited interest on borrowed money, with modest loan rates charged. This leverage between assumed loan rate credits versus loan rate charges can turbo-charge an IUL illustration. Opponents of IUL contracts decried the practice, and even some IUL carriers voiced interest in reining in the practice.

AG49 did not outlaw Participating Loans under IUL, nor did it restrict how they might be reflected in testing by the Illustration Actuary. Instead, AG49 took a simplistic approach of limiting the difference between the assumed illustrated credited rate on borrowed amounts and the illustrated loan charged rate on those same funds to 100 basis points (annually, presumably). This limitation should curtail much of the more aggressive Participating Loan illustration activity, although the 100 basis point limit paints a broad brush to a practice that could have subtle variations (e.g., negative loan margins for limited periods or as a form of persistency bonus, negative loan margins on non-indexed accounts, or negative loan margins due to low Moody’s-based loan charged rates).

## Additional Disclosures

AG49 requires additional alternative disclosures in addition to the basic illustration ledger. First, an Alternative Scale ledger must be shown in equal prominence to the basic illustration. This Alternative Scale must assume that all premiums are deposited into the IUL’s Fixed Account, or if no Fixed Account

is offered, assume a credited rate equal to the average of the index account's guaranteed credited rate and the index account's current illustrated rate. In addition, if any policy loan activity is illustrated in the basic illustration, the rate credited to borrowed funds cannot exceed the loan rate charged on those funds (i.e., no participating loan leverage). The purpose of this Alternative Scale is to inform the prospective purchaser of the sensitivity of projected values to the assumed index credited rate and to policy loan leverage.

Other disclosures include the maximum and minimum values of the geometric average annual return of the over 10,000 calculated to determine the maximum illustrated index credited rate. The intent of AG49 here is to provide prospects a sense for the extreme values of the BIA's performance over a 25-year period. Many have questioned the usefulness of this disclosure, preferring instead a summary of 25th, 75th, and other percentile ranges across a full range of performance.

The final additional disclosure is a table showing historical index changes over the latest twenty-year period, side-by-side with the corresponding IUL credited interest rates over the same period. This disclosure is intended to help prospects understand the relationship of actual index changes over time to the policy's credited rates.

The above additional disclosures are a small subset of the possible disclosures that could add further understanding to the workings of an IUL contract. Regulators chose these three representative disclosures in an attempt to aid prospects in understanding IUL performance mechanics. While these three choices are not necessarily the most effective disclosures, they were chosen as a helpful expansion of information.

## The Post-AG49 World

AG49 is really a set of surgical changes to IUL illustrations that was intended to target specific concerns that regulators harbor about IUL illustrations. However, in many ways, AG49 is only a beginning. Even now, plans exist to re-open the entire NAIC Model Illustrations Regulation to re-evaluation and to separately re-address remaining concerns with IUL illustrations.

The portions of AG49 related to the maximum illustrated index credited rate and the provisions on the net earned rate in the DCS are effective as of September 1, 2015. The AG49 provisions related to maximum loan leverage and additional disclosures are effective on March 1, 2016. IUL insurers are not expected to struggle in meeting either of these effective dates.

So, what will be the industry reaction to AG49? Here are some likely directions:

- A. There will be a reduction in the number of index account offerings, with the S&P 500 gaining even greater prominence. S&P 500 Index Accounts with different crediting approaches will stay viable.
- B. Non-S&P 500 Index Accounts will use different methods, beyond traditional individualized illustrations, to promote their advantages.
- C. Insurers with competitive advantages in hedging, such as in the area of dynamic hedging, will see that advantage decrease on a relative basis.
- D. AG49 will encourage the continued design of capped IUL contracts, at the expense of participation rate products.

- E. Persistency bonuses on IUL contracts will expand and proliferate, and the bonuses will take all forms - additional credited interest, later year refunds of COIs or loads, and later year reductions of COIs and fees. The maximum illustrated index interest calculation is generally viewed by insurers as a pre-bonus limitation, not a post-bonus limitation. This will encourage the use of persistency bonus starting earlier and at stronger levels. Of course, such bonuses must be considered in the Illustration Actuary's certification testing.
- F. Nothing in AG49 prevents insurers from offsetting an artificially high cap with higher loads, even percent of account value loads. However, AG49 imposes practical limitations on how high such caps can be. High caps would result in higher maximum illustrated index credited rates, even though the bottom-line illustrated accumulations or income amounts may not show any greater competitiveness.

AG49 represents a significant new event in illustrations of the industry's fastest-growing product. As life insurers and their producers adjust, IUL products will adapt, but their core message will still resonate with buyers.

## About the Author

**Timothy C. Pfeifer, FSA, MAAA** is President of Pfeifer Advisory LLC, a consulting firm based in Libertyville, Illinois. Tim specializes in the areas of life insurance and annuity product and market development and strategy. An actuary by background, Tim has been active in the life insurance industry for over 34 years, and a consultant for over 29 years. His clients include most life insurance carriers and asset managers in the industry. He is a frequent author in industry publications, a speaker at industry gatherings, and has been quoted in the Wall Street Journal, CNN, and other financial media.

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