



## Chairperson's Corner: A New Look

By Dave Armstrong

**M**arch means the start of spring, longer days and warmer weather. Spring is also a time of rebirth. This month, we're introducing the new digital format of *The Financial Reporter*. This will replace the quarterly printed version that was mailed out previously. Feedback from the membership indicated a preference for content to be delivered more frequently and in a more easily consumable format. In response, the SOA is moving to electronic delivery of all section newsletters in 2020. Going forward, *The Financial Reporter* will be published more frequently than it has in the past. This change will promote timely subject matter as well as easy viewing and sharing of content.

More and more, our members are seeking lower-cost opportunities for continuing education as well as additional ways to stay current on industry trends and developments. The SOA is reviewing its professional development program and conducted a survey in late January supporting this initiative. This survey gave members an opportunity to provide input as the SOA considers design and delivery of educational opportunities going forward. The Financial Reporting Section will continue to offer to section members webcasts and podcasts on important and relevant topics, and we look forward to working with the SOA on this important project.

Right about now, most of us in financial reporting roles are emerging from the year-end grind and we're all looking forward to spring (and for those few moments where we can catch our breath before first-quarter close). The work of the section council gains momentum, too, as the financial reporting busy season wraps up. The council will hold its face-to-face meeting



this month, where it will have the opportunity to spend time together and focus on the activities for the remainder of the year. In addition to planning continuing education opportunities for the year and supporting research, the section maintains several resources offering practical content supporting the day-to-day work of financial reporting actuaries. For instance, the Financial Reporting Section webpage contains a list of resources for GAAP Long Duration Targeted Improvements, as well as for IFRS 17. These resources are updated regularly as new content becomes available. While you're visiting the Financial Reporting Section website, I encourage you to take a few moments to review the list of volunteer opportunities and to send your feedback on section content, including suggestions for how the council might more effectively meet the needs of our membership.

Going forward, I hope that you find the new newsletter format informative and effective. And the new format is more portable, so maybe you're reading this as you get a chance to enjoy warmer spring weather!

*The views reflected in this article are those of the author and do not necessarily reflect the views of Ernst & Young LLP or other members of the global EY organization. ■*



David Armstrong, FSA, MAAA, is a managing director at Ernst & Young LLP. He can be reached at [david.armstrong2@ey.com](mailto:david.armstrong2@ey.com).



# GAAP Targeted Improvements—Universal Life Loss Recognition

By Steve Malerich

*Editor's note: The views expressed in this article are those of the author and do not necessarily reflect the views of the author's firm.*

In 2018, the Financial Accounting Standards Board (FASB) released Accounting Standards Update No. 2018-12: Targeted Improvements to the Accounting for Long-Duration Contracts (LDTI). For universal life (UL) loss recognition, explicit changes were few—remove DAC and maintenance expenses, add disclosures. Beyond these, LDTI does not require any change to existing practice. It does, however, present some challenges that can be addressed with a little more change.

## THE UGLY SIDE OF MINOR CHANGES

### Old Problems Persist

GAAP defines loss recognition in terms of cash flow (premiums, benefits and expenses). Otherwise, UL accounting focuses on transactions surrounding the account value (deposits and withdrawals, assessments and excess benefits). This inconsistency has led some actuaries to employ approximate techniques for routine loss recognition. More precise (but inconvenient) techniques are used only when the approximate techniques signal that remaining margins are small or negative. Debates (especially with auditors) ensue over when it is necessary to do the extra work.

### New Problems Develop

LDTI creates new inconsistencies between UL and other products. Consider four major nonparticipating product



categories—traditional, limited-payment, universal life and deferred annuity.

Through a cap on net premiums, traditional and limited-payment contracts are effectively subject to loss recognition for each valuation cohort. The moving of many deferred annuity features into market risk benefits means that they will also recognize losses for individual valuation cohorts.

With the elimination of asset yield as a traditional reserve discount rate, an aggressive investment strategy won't avoid loss recognition on traditional or limited-payment cohorts. It also means that a conservative investment strategy won't cause loss recognition. Similarly, investment strategy for deferred annuities will neither create loss recognition nor offset any adverse effects in the fair value of market risk benefits.

Among these four products, UL is the only one that can be aggregated at a high level for loss recognition and for which loss recognition is sensitive to investment strategy. Consequently, financial statement users may come to view companies with large UL blocks more cautiously than companies with less UL exposure.

### Opportunities

These problems can be avoided. Subtopic 944-60 is not very prescriptive about how to measure loss recognition. Existing practice developed at a time when loss recognition provisions were understood to be linked with the traditional reserve requirements. LDTI has severed that link.

Even where subtopic 944-60 is prescriptive, it is possible to address these problems and still comply with the standards. The new problems can be resolved with updates to accounting policy. The old problem can be resolved through process design, though the precise form will depend on accounting policy.

## ACCOUNTING POLICY

In some ways LDTI increases the threshold for loss recognition. Acquisition costs and maintenance expenses are no longer included in loss recognition. For UL, 100 percent of assessments can be devoted to funding future benefits, leaving nothing to cover future expenses.<sup>1</sup> For companies that seek to avoid loss recognition as much as possible, this could seem beneficial. Avoiding loss recognition, however, is not the same as avoiding losses. A high threshold means that unprofitable UL products become an ongoing drain on income.

In other ways, LDTI decreases the threshold. Except for the “present value of future profits” on acquired business, the cap on the traditional net premium ratio effectively forces some loss recognition to a lower level of aggregation and removes investment income from the test. Where annuity features now require fair value reserves, adverse effects are also recognized at a lower level. These changes mean that unprofitable products must be recognized as such, except for UL.

These create significant differences between accounting for major product categories, all due to their different forms without any regard to similarities in their substance.

A company could reduce or eliminate these differences by not considering investment income, by aggregating at a lower level, or both. Not considering investment income could leave interest margin to support future expenses. Reducing the level of aggregation could reduce future drain from unprofitable products. Both changes could enhance consistency among products. LDTI’s new disclosure requirements provide a clear conduit for a company to inform statement users about such policies.

## ACCOUNTING INTERPRETATIONS

Some of the accounting policy choices depend on interpretation of the updated standards. These questions should be discussed with accounting professionals, including auditors, before making any final determination of company policy.

### ***Is it appropriate to record loss recognition that would allow positive investment margins to increase future income?***

Except for assessments that feed additional reserves for annuitization, death or other insurance features, GAAP does not recognize investment performance as a characteristic of long-duration contracts. In explaining the change to traditional reserve discounting, the LDTI Basis for Conclusions (paragraph BC62)

states that, “An insurance entity with a lower quality investment portfolio should not report a lower liability ... simply because the ... portfolio has a higher estimated rate of return. ...” This change will make it possible to profit from investment margins even after a company records a loss by capping net premiums.

In other words, GAAP sees a substantive difference between investment margin and contract profit. Applying that broader principle to UL loss recognition, together with the stipulation in paragraph 944-60-50-2 that a company disclose whether anticipated investment income is included in testing, suggests that a company can recognize a loss even when it expects to profit from future asset performance.

### ***Is it appropriate to not record loss recognition if negative investment margins are greater than positive margins in the insurance charges?***

For traditional contracts, negative interest margin has no effect on the capping of the net premium ratio. For deferred annuity contracts, a company is prohibited from recognizing an immediate loss to offset future deficiencies in its interest margin.

Again, GAAP sees a substantive difference between investment margin and contract profit, suggesting that a company need not recognize a loss just because its investment strategy is unable to support expected interest crediting.

### ***Can a company change its level of aggregation as part of LDTI implementation?***

Aggregation is tied to the “manner of acquiring, servicing, and measuring the profitability of its insurance contracts...” (ASC 944-60-25-3). LDTI does not change that. If, however, LDTI causes a company to re-examine any of those criteria, it could lead to changes that affect aggregation.

A company may conclude, for example, that the new disclosures represent a different manner of measuring profitability. Since disaggregated disclosure is required by LDTI, adopting the same level for loss recognition might be considered part of LDTI implementation.



A more extreme disaggregation, perhaps matching the valuation cohort level now required for other contracts, could still be considered an acceptable change in the “manner of ... measuring the profitability” but may be harder to tie directly to LDTI implementation. This might require a voluntary change in accounting principle. The only practical differences from an LDTI change are that a voluntary change may be made at a time other than transition to LDTI but must be “preferable” (ASC 250-10-45-2(b)). Transparency and consistency are generally regarded as preferable.

## METHODOLOGY

### Discount Rate

Discounting at expected asset yield became a norm when loss recognition was linked to traditional reserve standards that required a rate based on asset yield.

LDTI severed the link between discount rate and asset yield and removed traditional reserves from the scope of loss recognition. Without those links, loss recognition leaves open the question of what to use for discount rates.

Paragraphs 944-60-25-7 and 50-2 both refer to investment performance, suggesting that an asset yield assumption remains acceptable. The second of those also seems to suggest that this is a choice, not a requirement. Paragraph 944-60-35-5 describes loss recognition as a revision to the basic contract liability, suggesting that the contract rate of paragraphs 944-40-30-20 and 30-26 might be appropriate for UL.

Whether discounting at expected asset yield or at the contract rate (an accounting policy choice), paragraph 944-60-30-1 does require the use of “revised assumptions.” The discount rate, therefore, should match the corresponding rate used in projecting benefits.

### Discounted Cash Flow

Paragraph 944-60-30-1 still describes a deficiency in relation to future gross premiums and benefits. Using a discounted cash flow approach, therefore, may still be viewed as the correct method of assessing basic loss recognition.

Paragraph 944-60-50-2 requires disclosure of “whether the entity considered anticipated investment income. ...” To consider investment income, one should discount cash flows at the current expected asset yield rate. To not consider investment income, one should discount at the current contract rate.

### Discounted Margin

Unlike cash flows, discounted margins can usually be pulled from basic UL valuation processes. When properly constructed under LDTI, discounted margin is not an approximation. To consider investment income, one should discount all assessments (including amortization of future front-end loads) and excess benefits at the current expected asset yield rate. To not consider

investment income, one should exclude the interest margin and discount at the current contract rate.

### Comparing Techniques

Under LDTI, the discounted margin approach is equivalent to the discounted cash flow approach for UL products that do not include front-end loads.<sup>2</sup>

Front-end loads have an immediate effect on policyholder account value and hence on future cash flows that depend on account value. Cash flows, therefore, depend on the timing of the loads, not the timing of their amortization. Profit, however, depends on the amortization. Without interest accretion on the unearned revenue liability, discounted margin is more conservative than discounted cash flow—but will produce a higher reserve only when needed to offset future losses. In other words, any additional loss recognition from discounted margin would be required anyway, by paragraph 944-60-25-9.

The following formulas begin with a discounted cash flow measurement, express the equivalence of discounted margin with loads as charged, and end with discounted margin with loads as amortized.<sup>3</sup>

Gross sufficiency (considering investment income) can be expressed as:

$$\begin{aligned} & \text{Account Value} + \text{Unearned Revenue} + \text{Additional Liability} \\ & \quad - \text{Inducement Asset} + \text{PV}_{\text{Asset Yield}} (\text{Cash Deposits}) \\ & \quad - \text{PV}_{\text{Asset Yield}} (\text{Cash Benefits}) \\ & = \text{Unearned Revenue} + \text{Additional Liability} - \text{Inducement Asset} \\ & \quad + \text{PV}_{\text{Asset Yield}} (\text{Cash Assessments}) - \text{PV}_{\text{Asset Yield}} (\text{Excess Benefits}) \\ & \geq \text{Additional Liability} - \text{Inducement Asset} \\ & \quad + \text{PV}_{\text{Asset Yield}} (\text{Assessments}) - \text{PV}_{\text{Asset Yield}} (\text{Excess Benefits}) \end{aligned}$$

where “cash assessments” include front-end loads as they are charged but “assessments” include them as they are amortized.

Insurance sufficiency (not considering investment income) can be expressed as:

$$\begin{aligned} & \text{Account Value} + \text{Unearned Revenue} + \text{Additional Liability} \\ & \quad - \text{Inducement Asset} + \text{PV}_{\text{Contract Rate}} (\text{Cash Deposits}) \\ & \quad - \text{PV}_{\text{Contract Rate}} (\text{Cash Benefits}) \\ & = \text{Unearned Revenue} + \text{Additional Liability} - \text{Inducement Asset} \\ & \quad + \text{PV}_{\text{Contract Rate}} (\text{Insurance Charges}) \\ & \quad - \text{PV}_{\text{Contract Rate}} (\text{Excess Benefits}) \\ & \geq \text{Additional Liability} - \text{Inducement Asset} \\ & \quad + \text{PV}_{\text{Contract Rate}} (\text{Insurance Assessments}) \\ & \quad - \text{PV}_{\text{Contract Rate}} (\text{Excess Benefits}) \end{aligned}$$

where “insurance charges” and “insurance assessments” differ from “cash assessments” and “assessments,” respectively, by excluding interest margin.

### Profits Followed By Losses

Discounting of margins will often ensure that expected losses become apparent while there is still profit to set aside for future losses. The method can’t, however, tell whether future profit will come before or after a period of losses. Since ultimate profits can’t be accelerated to offset earlier losses, it may still be necessary to examine expected profit patterns.

### CONCLUSIONS

LDTI does not require much change to UL loss recognition. The FASB simply did not see this as an area that needed to change.

Making only the required changes, however, may mean continuing an inefficient process and introducing significant differences among products. The result may be an inconvenient

process with results that are viewed cautiously by financial statement users.

Each of these problems can be overcome by a change in accounting policy or by a more streamlined process. ■



Steve Malerich, FSA, MAAA, is a director at PwC. He can be reached at [steven.malerich@pwc.com](mailto:steven.malerich@pwc.com).

### ENDNOTES

- 1 LDTI's exclusion of interest margin on additional reserves from assessments may make it available to support expenses, but only to the extent the total liability exceeds the minimum required by loss recognition. Once a product reaches the loss recognition threshold, all investment income is needed to fund benefits.
- 2 For proof of the relationship between discounted cash flow and margin, contact the author.
- 3 These formulas would also subtract present value of future profit (on acquired contracts) and might be adjusted for reinsurance (depending on company policy).



# Financial Reporting Research Update

By Mark Walker and Ronora Stryker

**R**esearch is a primary mission of the Financial Reporting Section and a significant use of our section dues revenue. Here is an update, as of January 2020, on projects in process and those recently completed.

## CURRENTLY IN PROCESS

“Mortality by Socioeconomic Category in the United States.” Just underway, the purpose of this study is to construct a set of life tables for groups of counties based on their relative socioeconomic position.

“Mortality Improvement Trend Analysis.” This research examines the key drivers of mortality improvement and how they vary. Work has yet to begin on the project, as a researcher is being sought to perform the study.

“Predictive Modeling in Life Insurance Underwriting.” This study uses a case study approach to create a resource to help practitioners develop, evaluate, implement and monitor predictive models used in underwriting. This project is in the early stages.

“Delphi Study of Economic Variables.” This study uses a Delphi Study framework to gather insights on the thought processes experts employ to estimate future values of economic variables. Work is in the mid-project stage.

“Living to 100.” This research initiative focuses on aging—increases in survival rates and the resulting increase in aging populations—together with its implications to social, financial, retirement and health care systems. It involves a symposium that was held in January and generates a lasting body of research to educate and aid individuals and policymakers in addressing the potential needs and services of the future advanced-age populations. This is in the mid-project stage.



“Simplified Methods for Principle-Based Reserve Calculations.” This project is in the late stages.

“Macroeconomics-Based Economic Scenario Generation.” This project intends to find a practical way to improve economic scenario generators by studying the causes of economic development, economic volatility and capital market volatility. Work is in the late-project stage.

“Simplified Issue Underwriting.” This research explores the application of simplified issue underwriting in the life insurance industry. Among the areas studied are the definition, developments, characteristics, challenges, current practices, assumptions and data elements for simplified underwriting. This project is nearing completion.

## RECENTLY COMPLETED

“Modeling and Forecasting Cause-of-Death Mortality.” This study develops mortality projection models and produces cause-of-death mortality forecasts. <https://www.soa.org/resources/research-reports/2019/cod-mortality-forecasting>

“The Application of Credibility Theory in the Canadian Life Insurance Industry.” This survey of credibility practices of Canadian life insurers compares and contrasts credibility methods used by the companies. The Financial Reporting

Section contributed to the funding for this project. <https://www.soa.org/resources/research-reports/2019/application-credibility-theory/>

“A Machine Learning Approach to Incorporating Industry Mortality Table Features in Mortality Analysis.” This research applies a machine learning approach that enables a practicing actuary to incorporate key industry mortality table features into insured mortality analysis. <https://www.soa.org/resources/research-reports/2019/2019-machine-learning-approach/>

“The Use of Predictive Analytics in the Canadian Life Insurance Industry.” This project surveys Canadian life insurers on the use of predictive analytics in practice. The Financial Reporting Section contributed to the funding for this project. <https://www.soa.org/resources/research-reports/2019/predictive-analytics-canadian-life-insurance/>

## REQUEST FOR RESEARCH PROPOSALS

Do you have an idea for a research topic you would like to see the Financial Reporting Section consider for funding? If so, we want to hear from you! For more information, please contact Mark Walker or Ronora Stryker. ■



Mark Walker, FSA, is a retired actuary and a member of the Financial Reporting Section Council. He can be reached at [mark\\_walker05@msn.com](mailto:mark_walker05@msn.com).



Ronora Stryker, ASA, MAAA, is a research actuary for the Society of Actuaries. She can be reached at [rstryker@soa.org](mailto:rstryker@soa.org).