EDUCATION COMMITTEE

OF THE

SOCIETY OF ACTUARIES

INDIVIDUAL LIFE AND ANNUITIES

LIFE FINANCIAL MANAGEMENT STUDY NOTE

INSURANCE CONTRACTS

September 2020

The Education Committee provides study notes to persons preparing for the examinations of the Society of Actuaries. They are intended to acquaint candidates with some of the theoretical and practical considerations involved in the various subjects. While varying opinions are presented where appropriate, limits on the length of the material and other considerations sometimes prevent the inclusion of all possible opinions. These study notes do not, however, represent any official opinion, interpretations or endorsement of the Society of Actuaries or its Education Committee. The Society is grateful to the authors for their contributions in preparing the study notes.

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Insurance contracts

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About this guide

PwC is pleased to offer our *Insurance contracts* guide addressing accounting by insurance and reinsurance entities for insurance contracts. This guide has been updated as of September 30, 2020.

This guide summarizes the applicable accounting literature, including relevant references to and excerpts from the FASB's Accounting Standards Codification (the Codification). It also provides our insights and perspectives, interpretative and application guidance, illustrative examples, and discussion on emerging practice issues. The PwC guides should be read in conjunction with the applicable authoritative accounting literature.

References to US GAAP

Definitions, full paragraphs, and excerpts from the Financial Accounting Standards Board's Accounting Standards Codification are clearly labelled. In some instances, guidance was cited with minor editorial modification to flow in the context of the PwC Guide. The remaining text is PwC's original content.

References to other PwC guidance

This guide provides general and specific references to chapters in other PwC guides to assist users in finding other relevant information. References to other guides are indicated by the applicable guide abbreviation followed by the specific section number. The other PwC guides referred to in this guide, including their abbreviations, are:

- *Business combinations and noncontrolling interests (BCG)*
- *Derivatives and hedging (DH)*
- *Fair value measurements, global edition (FV)*
- *Financial statement presentation (FSP)*
- *Foreign currency (FX)*
- *Loans and investments (LI)*

Summary of significant changes

The following is a summary of the noteworthy revisions to the guide since it was first published in October 2019. Additional updates may be made to future versions to keep pace with significant developments.

Revisions made in September 2020

IG 3, *Deferred acquisition costs*

- Example IG 3-9 was added, which shows an alternative DAC amortization approach that determines the current period amortization taking into account the actual persistency observed in the current period.

IG 5, *Long duration liabilities*

- ❑ Question IG 5-6, Question IG 5-7, Question IG 5-8, and Question IG 5-9 were updated for additional insights into discount rates used for long-duration contracts.
- ❑ Question IG 5-23 and Question IG 5-24 were added to address emerging market risk benefit issues.

IG 7, *Loss recognition (premium deficiency)*

- ❑ Traditional life present value of future profits loss recognition testing questions related to grouping and discount rates have been moved to IG 12, *Business combination considerations*.

IG 9, *Long duration reinsurance*

- ❑ IG 9.6.1.1 was updated to include additional insights on calculating the ceded net premium ratio, including details on methods used to develop a constant margin, and to describe the impact on ceded reinsurance of the 100% net premium ratio "cap" and the liability "floor" applicable to the direct contracts.
- ❑ Example IG 9-1 was added illustrating the accounting for 100% coinsurance of a block of traditional inforce insurance contracts.
- ❑ IG 9.7.1 was enhanced to reflect developing issues and insights related to assumed reinsurance.

IG 10, *Presentation and disclosure*

- ❑ Footnotes in IG 10.3.1.2, Figure IG 10-1 were enhanced to provide more detailed explanations of the line items in the liability for future policy benefits rollforward.

IG 11, *Effective date and transition*

- ❑ IG 11.2 was updated to reflect the FASB's latest deferral of the effective date of ASU 2018-12, expected to be finalized in late fall of 2020.
- ❑ Example IG 11-1 was added to include a numerical example of the accounting at transition and subsequently when the net premium ratio exceeds 100% at the transition date.
- ❑ Question IG 11-3 was added and Question IG 11-4 was updated to provide further guidance related to carryover discount rates at transition.
- ❑ Question IG 11-7 and Question IG 11-8 were added to address claim liabilities considerations at transition.
- ❑ IG 11.3.3 was updated to further address transition date adjustments for limited-payment contracts, and a related decision tree was added as Figure IG 11-2.
- ❑ IG 11.3.7 and IG 11.3.8 and Question IG 11-15 were updated to provide more detailed guidance on MRB transition impacts on balances such as the present value of future profits.

IG 12, *Business combination considerations* was added, which was formerly located in our *Business combinations and noncontrolling interests* guide.

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Chapter 1: Overview and scope of insurance accounting

1.1 Overview and scope of insurance accounting – chapter overview

The FASB issued new guidance, Accounting Standards Update 2018-12, *Financial Services—Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts* (ASU 2018-12), that revises key elements of the measurement models and disclosure requirements for long-duration insurance contracts issued by insurers and reinsurers. It is the biggest change in US GAAP for life insurers in the last 40 years. The FASB's objective was to improve, simplify, and enhance accounting for long duration contracts.

This guide assumes that ASU 2018-12 has been adopted.

ASC 944 *Financial Services-Insurance* (ASC 944) provides guidance on various elements of insurance transactions, focusing principally on:

- Insurance revenue recognition
- Claim and benefit liability and related expense recognition
- Acquisition cost deferability and amortization

Guidance is also provided on balance sheet and income statement presentation and disclosure of insurance activities. In addition, ASC 944 provides incremental industry-specific accounting guidance on other accounting and financial reporting matters, including certain aspects of investment contract transactions, business combinations, and derivatives.

ASC 944 includes highly-specialized accounting guidance that is applicable only to insurance entities, as defined. The insurance contract accounting guidance within ASC 944 applies to those written (issued) contracts qualifying as insurance as well as assumed reinsurance contracts and purchased reinsurance contracts.

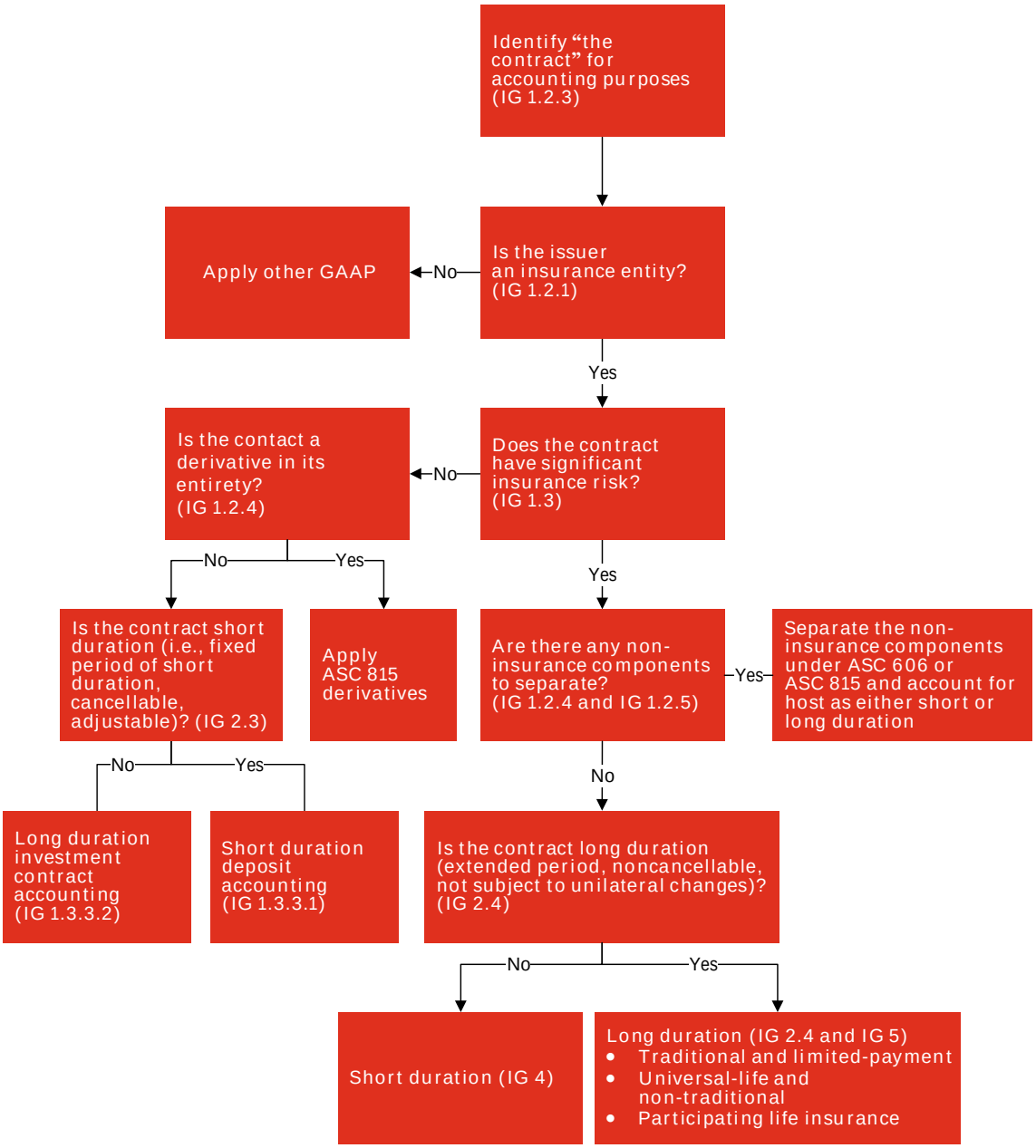
This chapter provides an overview of:

- The types of entities that are subject to the scope of ASC 944
- The types of transactions that are subject to the scope of ASC 944 either partially or totally
- The insurance risk analysis that determines whether a issued contract is subject to insurance (or reinsurance) accounting under ASC 944

1.2 Scope of ASC 944 guidance

Figure IG 1-1 illustrates the contract classification assessment for insurance contracts other than financial guarantee, mortgage insurance, and title insurance.

Figure IG 1-1
Contract classification assessment for insurance contracts



1.2.1 *Entities subject to ASC 944*

The accounting in ASC 944 is industry-specific guidance, meaning that the guidance is applicable only to insurance entities as defined in ASC 944-10-15. Evidence that an entity is an insurance entity may include that it:

- Holds an insurance license
- Is subject to reporting requirements with insurance regulators

- Reflects its insurance mission in its purpose statements and prospectuses filings
- Is subject to SEC Regulation S-X: Financial statement requirements: Article 7 – Insurance companies

Entities to which various subsections of ASC 944 apply include:

- Life and health insurance entities (stock and mutual entities)
- Property and liability (or "property/casualty") insurance entities (stock and mutual entities)
- Title insurance entities
- Assessment entities
- Fraternal benefit societies
- Mortgage guaranty insurance entities
- Financial guaranty insurance entities
- Pools other than public-entity risk pools
- Syndicates
- Captive insurance entities
- Reinsurance entities
- Reciprocal exchanges or inter-insurance exchanges

1.2.2 *Contracts subject to ASC 944*

The purpose of insurance is to provide indemnification against loss or liability from specified events and circumstances that may occur or be discovered during a specified period. The insurer provides this protection to the policyholder in exchange for a premium.

Contracts qualify as insurance (or reinsurance) for accounting purposes if they transfer significant insurance risk, as described in IG 1.3. Contracts written by insurance entities that do not transfer significant insurance risk are generally accounted for as deposits (sometimes referred to as "investment contracts" in the context of long-duration contracts), as described in IG 1.3.

Contracts that in form are insurance or reinsurance may in substance have characteristics that require them to be accounted for totally or partially under other standards, such as ASC 815, *Derivatives and Hedging*, or ASC 606, *Revenue Recognition*.

1.2.3 *ASC 944 scope — unit of account*

In order to assess whether "a contract" is subject to ASC 944, it is important to use the appropriate unit of account. The unit of account for scoping purposes is generally the individual contract. However, in practice, as a simplification, scoping is done by product type. If done by product type, care

should be taken to make sure contracts are similar and do not include contracts both with and without significant insurance risk.

We believe that substance should govern over form in determining "the contract" for accounting purposes. Therefore, separate contracts with the same entity or related parties that are negotiated as a package with a single commercial objective, or when the amount of consideration paid in one contract depends on the price or performance of the other, should be viewed as a single contract for scoping purposes.

For certain measurements, ASC 944 explicitly requires grouping. Examples include:

- When truing up the net premium ratio for nonparticipating, traditional, and limited payment contracts, ASC 944 prescribes that a group cannot contain contracts with different issue years, but does not provide any more specific guidance on grouping.

- When determining whether a premium deficiency should be recognized for contracts other than nonparticipating traditional and limited payment contracts, ASC 944 specifies that for purposes of the premium deficiency test, contracts be grouped consistent with the insurer's manner of acquiring, servicing, and measuring the profitability of its insurance contracts.

See IG 5.2 for further guidance on liability for policy benefits and determination/true-up of the net premium ratio.

1.2.4 *ASC 944 scope — contracts subject to derivative guidance*

The derivative accounting guidance in ASC 815-10-15-13 provides a scope exception for certain insurance contracts from derivative accounting in their entirety, and careful consideration is required to assess if a contract meets the scope exception or not. The insurance contracts that have significant insurance risk would generally meet the ASC 815 insurance derivative scope exception. However, they may still contain embedded derivatives.

Certain insurance, deposit and investment contracts issued by insurance entities may also be subject to the provisions of ASC 815, because they contain features that meet the definition of an embedded derivative.

Question IG 1-1 provides an example for equity-indexed annuities where the equity-indexed return portion of the contract is generally required to be separated from the host and accounted for as an embedded derivative.

Question IG 1-1

Is an equity-indexed annuity that provides an interest crediting rate on the account balance based on the performance of an equity index (e.g. S&P 500) with a contractually-specified minimum interest crediting rate a hybrid instrument that contains an embedded derivative?

PwC response

Yes. The host is an investment contract under ASC 944 (i.e., a debt host) with multiple embedded derivatives (a contract holder prepayment option and an equity-return feature). The prepayment option would typically require payment of the contract account balance less a specified non-indexed

surrender charge to the contract holder, and thus would generally be clearly and closely related to the debt host, provided it does not contain an embedded interest rate derivative under the guidance in ASC 815-15-25-26. However, the equity option component of an equity-indexed annuity requires separate accounting under ASC 815-15-25-1.

Under ASC 815, contracts or portions of contracts identified as derivatives or embedded derivatives are required to be recorded at fair value through income. When ASC 815 requires separate fair value measurement of an embedded derivative, the remaining component of the insurance contract (the host) would be evaluated under the scope of ASC 944.

See DH 3.2.5 and DH 4.6.2 for further guidance on the scope exceptions and assessing whether embedded derivatives need to be separated. See IG 5.7 for further guidance on measurement of derivatives and embedded derivatives in insurance and investment contracts.

1.2.5 ASC 944 scope - transactions subject to revenue recognition guidance

Insurance contracts that are in the scope of ASC 944 are exempt from the ASC 606 revenue recognition guidance. Insurance entities may also execute contracts that function entirely as service contracts, with no insurance elements, such as administrative services only (ASO) contracts. Such contracts would be in the scope of ASC 606. In certain instances, a contract may be partially within the scope of ASC 606 and partially within the scope of ASC 944 or financial instrument guidance, such as a high deductible policy that also contains claims handling services.

1.3 Insurance risk assessment

Classification of an issued contract (sometimes called a direct or written contract) as insurance or reinsurance requires that the contract have significant insurance risk. Contracts that fail to meet the significant insurance risk test are required to be classified as investment contracts. Classification is done at contract inception and is typically not reevaluated unless the contract is amended.

Explicit guidance on analyzing significant insurance risk in issued contracts is limited, but high-level guidance is found in the following references.

ASC 944-20-05-5

The primary purpose of insurance is to provide economic protection from identified risks occurring or discovered within a specified period.

ASC 944-20-05-6

Insurance contracts may be characterized generally by both of the following:

a. the purchaser of an insurance contract makes an initial payment or deposit to the insurance entity in advance of the possible occurrence or discovery of the insured event.

b. when the insurance contract is made, the insurance entity ordinarily does not know if, how much, or when amounts will be paid under the contract.

ASC 450-20-60-14

For contingencies related to an insurance contract or reinsurance contract that does not, despite its form, provide for indemnification of the insured or the ceding company by the insurer or reinsurer against loss or liability, see paragraph 720-20-25-1.

ASC 720-20-25-1

To the extent that an insurance contract or reinsurance contract does not, despite its form, provide for indemnification of the insured or the ceding entity by the insurer or reinsurer against loss or liability, the premium paid less the amount of the premium to be retained by the insurer or reinsurer shall be accounted for as a deposit by the insured or the ceding entity. Those contracts may be structured in various ways, but if, regardless of form, their substance is that all or part of the premium paid by the insured or the ceding entity is a deposit, it shall be accounted for as such.

Further guidance on the evaluation of insurance risk for short-duration and long-duration contracts is described below.

Risk transfer guidance for evaluating reinsurance ceded to an assuming reinsurer is more prescriptive and is discussed in IG 8.5 and IG 9.5.

1.3.1 Short-duration insurance risk assessment

The glossary in ASC 944-20-20 defines insurance risk and related terms.

Definition from ASC 944-20-20

Insurance risk: The risk arising from uncertainties about both underwriting risk and timing risk. Actual or imputed investment returns are not an element of insurance risk. Insurance risk is fortuitous; the possibility of adverse events occurring is outside the control of the insured.

Underwriting risk: The risk arising from uncertainties about the ultimate amount of net cash flows from premiums, commissions, claims, and claim settlement expenses paid under a contract.

Timing risk: The risk arising from uncertainties about the timing of the receipt and payments of the net cash flows from premiums, commissions, claims, and claim settlement expenses paid under a contract.

Guidance on what constitutes insurance risk for direct insurance contracts written between insurers and policyholders is limited to the definitions in ASC 944-20-20. These general concepts apply to insurance contracts as well as to reinsurance contracts written between insurers and reinsurers.

In addition, more explicit, qualitative and quantitative risk transfer criteria exist for short-duration reinsurance contracts as the cash flows of a single reinsurance contract combine the gains and losses of numerous issued insurance contracts, which may be highly predictable in total (see IG 8.5). For example, in order for a reinsurance contract to pass the risk transfer test, there generally must be a reasonable possibility that the reinsurer will recognize a significant loss on the transaction. This evaluation is made by comparing all cash flows between the parties with the amounts paid or deemed to have been paid to the reinsurer.

Because there is limited guidance on risk transfer for direct contracts, the guidance on reinsurance risk transfer may be used by analogy. The ASC 720, *Other Expenses,* guidance on the accounting for insurance contracts by policyholders acknowledges the concept of risk transfer and notes that entities may find the conditions outlined in ASC 944 for reinsurance useful in assessing whether an insurance contract transfers risk.

1.3.2 Long-duration insurance risk assessment

Insurance risk for long-duration life insurance and annuity contracts focuses on the significance of mortality or morbidity risk (ASC 944-20-15). Mortality risk relates to the obligation to make payments that are contingent upon the death or continued survival of a specific individual or group. Morbidity risk relates to the relative incidence of disability due to disease or physical impairment.

An annuity contract that allows the holder to purchase an annuity at a guaranteed price on the settlement of the contract does not contain mortality risk until the annuity is purchased.

Annuity contracts may require an insurance company to make a number of payments that are not contingent on the survival of the beneficiary followed by life contingent payments. These contracts are considered insurance contracts unless:

a) the probability that the life contingent payments are made is remote, and

b) the present value of the expected life-contingent payments relative to the present value of all expected payments under the contract is insignificant.

If the mortality and morbidity risk in a long-duration life insurance or annuity contract is other than nominal, the contract should be classified as insurance. Nominal risk is defined as a risk of insignificant amount or remote probability. If nominal, the contract is classified as an investment contract.

There is a rebuttable presumption that a contract has significant mortality risk if a mortality benefit would vary significantly in response to capital markets volatility (see ASC 944-20-15-21). These contract features with other-than-nominal capital market risk need to be assessed to see if they meet the definition of a market risk benefit or an embedded derivative and are required to be accounted for at fair value. See IG 2.4.5 and DH 4.6.2, respectively, for more information.

The risk transfer analysis for long duration reinsurance requires that there be a reasonable possibility of significant loss to the reinsurer from the events insured by the underlying direct insurance contracts (see IG 9.5). The analysis of significant mortality or morbidity risk is the same as the criteria for direct contracts.

1.3.3 Contracts that fail the significant insurance risk criteria

Contracts that are written as insurance or reinsurance but fail the significant insurance risk test are accounted for as deposits. The accounting for the deposit depends on whether the contract is short duration or long duration.

1.3.3.1 *Short-duration contracts without significant insurance risk*

At inception, a deposit asset or liability is recognized based on the consideration paid or received, less any explicitly identified premiums or fees to be retained by the insurer or reinsurer, irrespective of the experience of the contract.

Deposit contracts that lack underwriting risk follow a financial instrument effective yield model, with the effective yield being a function of the deposit and future projected cash flows. Those contracts that have underwriting risk, but lack timing risk, require a discounted claim estimation measurement. For contracts with indeterminate risk, the effects of the contracts are not included in the determination of net income until sufficient information becomes available to reasonably estimate and allocate premiums.

See IG 8.7 for further discussion on the accounting models for short-duration contracts that fail the risk transfer criteria.

1.3.3.2 *Long-duration contracts without significant insurance risk*

Long-duration life and health contracts that do not indemnify against mortality or morbidity risk are required to be accounted for as investment contracts. As noted in IG 2.5.1, deferred annuity contracts issued by insurers are typically classified as investment contracts during the accumulation phase. However, they may have longevity risk and thus ultimately be classified as an insurance contract if and when the contract holder elects life-contingent payments in the annuitization phase of the contract.

Any payments received for investment contracts are reported as liabilities and accounted for in a manner consistent with the accounting for interest-bearing or other financial instruments. While investment contract liabilities are accounted for as deposits, some of the provisions within ASC 944 nevertheless apply to investment contracts. Examples include the guidance on deferred acquisition costs, contract modifications, separate accounts, and valuing annuitization benefit options during the accumulation phase of the contract.

See IG 5.5 for further discussion on the accounting for investment contracts issued by a direct insurer. See IG 9.4 for further discussion on deposit accounting for life reinsurance contracts that fail risk transfer.

1.4 FASB guidance for insurance contracts

In addition to the guidance in ASC 944, the FASB published a non-authoritative document entitled, *A Primer on Accounting Models for Long-Duration Life Insurance Contracts under US GAAP*, which discusses the accounting models that govern financial reporting of long-duration life insurance contracts under GAAP. Like all primers, it is neither comprehensive in scope nor complete in detail. Instead, it is an introduction to the three GAAP accounting models that are used by life insurance enterprises.

ASC 815, *Derivatives and Hedging*, provides guidance on the accounting for derivative financial instruments and accounting for hedging activities. Certain contracts issued by insurance companies may be subject to the provisions of ASC 815.

Figure IG 1-2 lists the paragraphs within ASC 815 that relate specifically to insurance products.

Chapter 2: Classification of insurance contracts

2.1 Classification of insurance contracts – overview

Insurance contracts are generally classified as either short duration or long duration. The distinction is based on the period of time of the insurance protection and the flexibility each party has in changing the terms of the contract. The classification, as well as other characteristics, has a significant effect on the accounting for a contract.

2.2 Scope and relevant guidance for insurance contracts

ASC 944-20, *Insurance Activities,* provides accounting models for different types of insurance contracts as well as investment contracts that have no significant insurance risk. ASC 815-10 allows the fair value option to be elected instead of the ASC 944 measurement for insurance contracts. Guidance in ASC 825-10 grants an option to measure many financial instruments and certain other assets and liabilities at fair value on an instrument-by-instrument basis. Insurance contracts are generally financial instruments that are eligible for the fair value option under ASC 825-10-15-4 (a). See FV 5.3 for discussion of fair value measurements.

2.3 Short-duration insurance – classification and measurement

A short-duration contract provides insurance coverage for a fixed period of short duration. The contract may have a specified term, such as one year. Alternatively, the term may not be specified, but may enable the insurer at the end of a specified period to cancel the contract or adjust the provisions of the contract, such as the amount of premiums or coverage provided, for future insured events. Typically, short-duration contracts would not have a duration of more than 3 to 5 years.

Under the short-duration insurance accounting model:

- Premiums are recognized as revenue over the coverage period in proportion to the amount of insurance protection provided, which in many cases is on a straight-line basis.
- Losses are recognized when insured events occur, based on the estimated ultimate cost to settle the claims, and are adjusted to reflect changes in estimates during the life of the contract.
- Eligible deferred acquisition costs are capitalized and amortized in proportion to premium revenue recognized.
- Cash flows from premiums and claims are included in cash flow from operations.

Short-duration contracts may contain embedded derivatives, which could require bifurcation under ASC 815, as described more fully in DH 4.6.2.

Most property and liability insurance contracts are short-duration contracts. Examples include homeowners, automobile, commercial property, workers' compensation, general liability, professional liability, and accident and health insurance. Life insurers may write certain types of coverages that are classified as short duration, such as group life, group long-term disability, and group short-term disability products.

See IG 4 for further information on the short-duration insurance contract accounting model.

2.4 Long-duration insurance – classification and measurement

A long-duration contract is one that is not subject to unilateral changes in its provisions and requires the performance of various functions and services (including insurance protection) for an extended period. Examples include contracts that are noncancelable or guaranteed renewable by the insurer, such as most life insurance and annuity contracts.

Long-duration contracts are further classified into several broad categories based on the product terms. These categories dictate the accounting model to be followed for revenue and cost recognition. These categories are discussed in the sections that follow.

Figure IG 2-1 provides a framework for determining the accounting classification for long-duration life insurance contracts.

Figure IG 2-1
Classification of long-duration life insurance contracts

Figure IG 2-1 Part 1

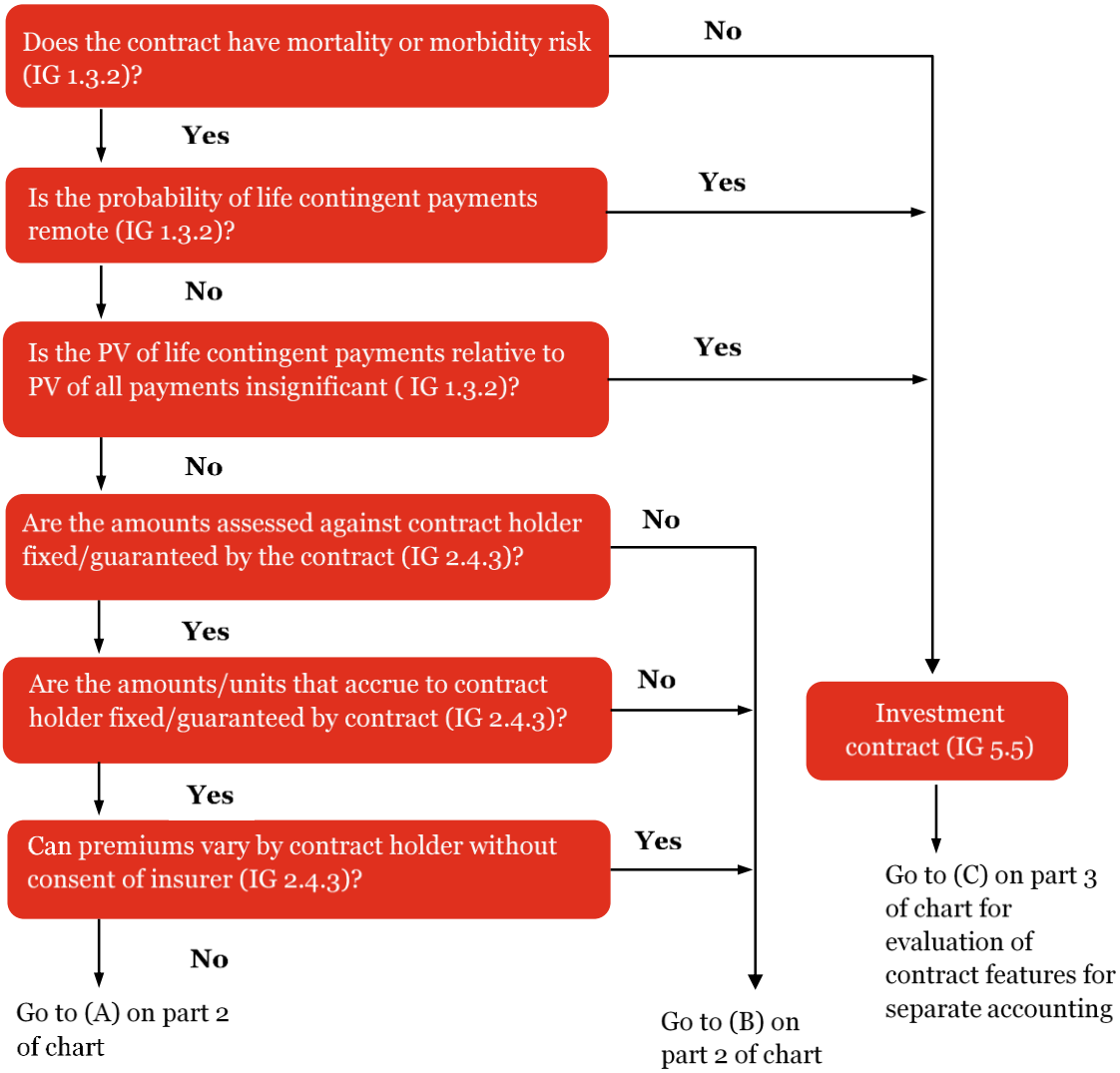


Figure IG 2-1 Part 2

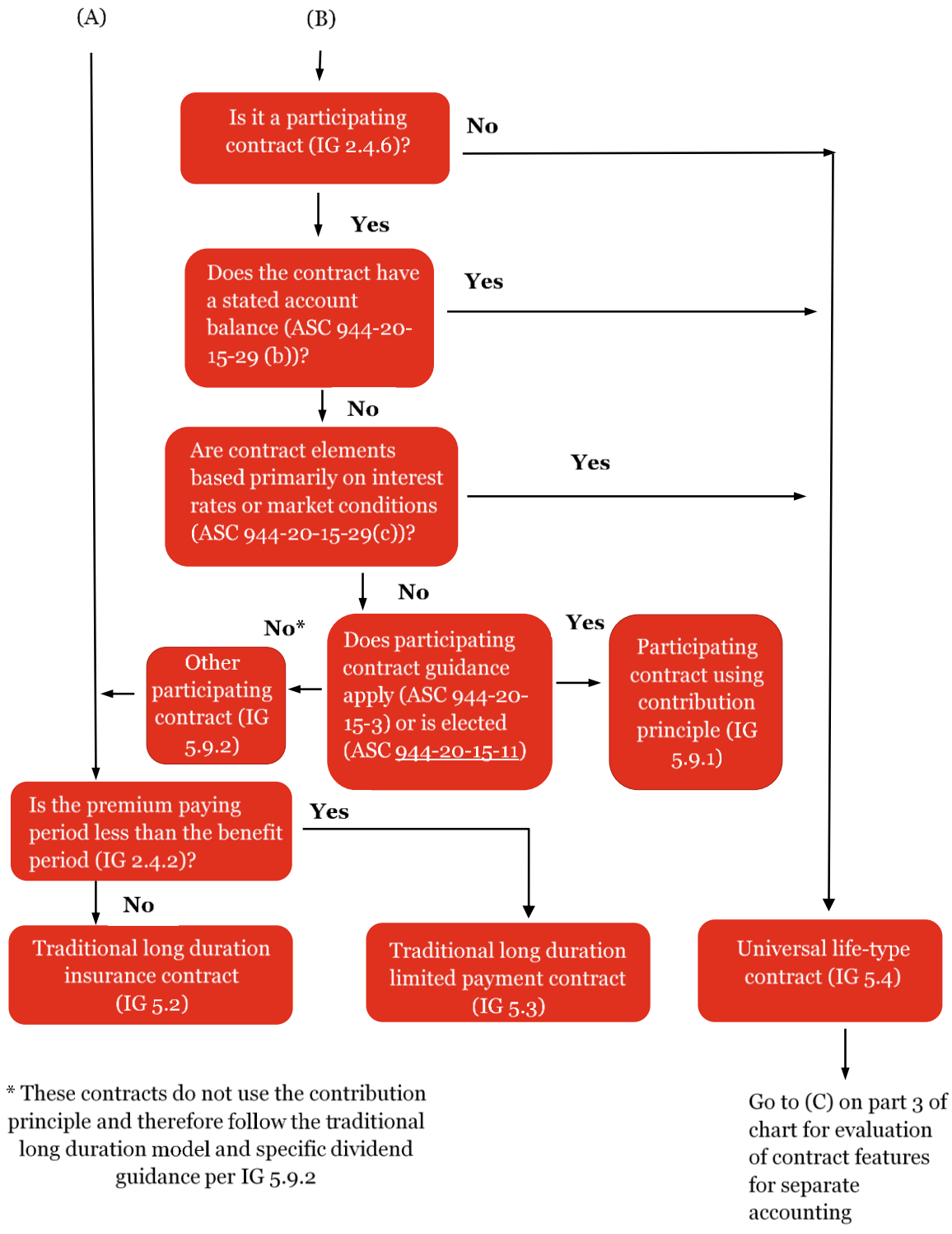
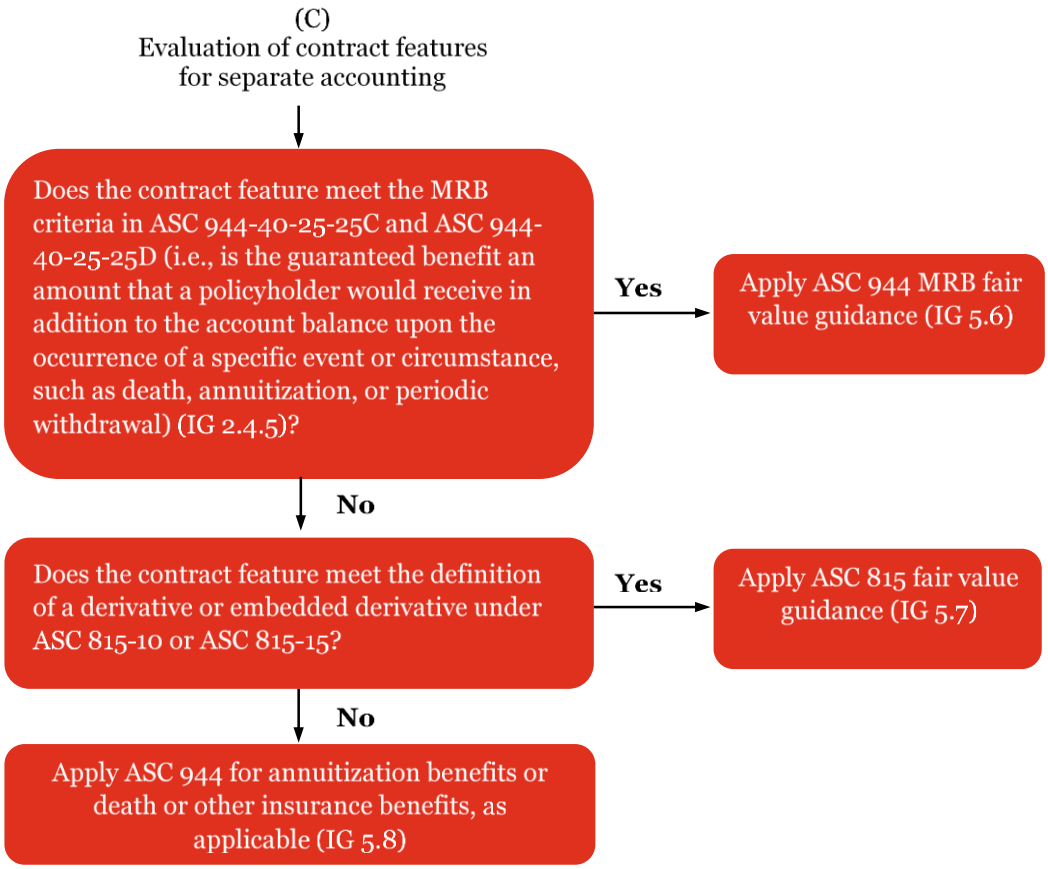


Figure IG 2-1 Part 3



2.4.1 Traditional long-duration insurance – classification and measurement

These contracts provide a specified, fixed amount of insurance benefit in exchange for a fixed premium, either upfront, for a fixed number of payments, or payable each year the policy is kept in force. Examples include whole-life insurance, guaranteed renewable term-life insurance and long-term disability insurance. See IG 5.2 for measurement guidance relating to traditional long-duration insurance contracts.

Under the traditional long-duration accounting model:

- Premium revenue is recognized when due.
- A liability for future policyholder benefits is recorded as the present value of estimated future policy benefits and related expenses less the present value of estimated future net premiums. As a result, expected insurance benefits (i.e., estimated future death, disability, or other claims and any

surrender benefits) are accrued over the life of the contract in proportion to premium revenue recognized. This method is referred to as the "net premium ratio" approach.

- Eligible deferred acquisition costs are capitalized and amortized to expense each period on a straight-line basis over the expected term of the related contracts (see IG 3).

- All assumptions (except for the expense assumptions) utilized in the "net premium ratio" approach, including mortality, morbidity, and terminations, are required to be reviewed (and updated as necessary) on an annual basis or more frequently if evidence suggests that assumptions should be revised. The updated cash flows used in the calculation are discounted using the discount rate or curve on the original contract issue date (the locked in discount rate). The revised net premium ratio is used to measure benefit expense based on recognized premium revenue in the period. The difference between the updated opening period and previous ending period liabilities due to updating the net premium ratio is presented as a remeasurement gain or loss (cumulative catch-up adjustment) in current earnings.

- A remeasurement of the liability is also required using a current discount rate. The difference between the ending period liability measured using the discount rate on the original contract issue date and the liability measured using the current rate is recorded in accumulated other comprehensive income.

- All premium and claim cash flows are classified as operating cash flows in the statement of cash flows.

2.4.2 *Traditional limited-payment – classification and measurement*

Traditional long-duration limited-payment contracts provide a specified, fixed amount of insurance benefit that extends beyond the period or periods in which premiums are collected. Fees assessed are also fixed or guaranteed. Examples include single pay life insurance and a life-contingent payout annuity. A life contingent payout annuity promises to pay a stream of fixed or variable periodic payments for the life of the insured (annuitant) that ends upon the death of the annuitant. See IG 5.2 long duration contract liabilities for measurement guidance related to limited-payment contracts.

- Under the traditional "limited pay" accounting model, premium revenue is recognized when due. Gross premium received in excess of the net premium is deferred (sometimes referred to as a "deferred profit liability" or "DPL" and amortized in relation to the discounted amount of insurance in force (for life insurance) or expected future benefit payments (for annuity contracts).

- Expected insurance benefits are accrued as a liability for future policyholder benefits.

- Eligible deferred acquisition costs are capitalized and amortized to expense each period on a straight-line basis over the expected term of the related contracts.

- All premium and claim cash flows are classified as operating cash flows in the statement of cash flows.

2.4.3 *Universal life-type contracts – classification and measurement*

Universal life-type contracts have charges or provide benefits that are not fixed and guaranteed. ASC 944-20-15-26 describes universal life-type contracts.

ASC 944-20-15-26

For purposes of the scope application of the Long-Duration Subsections of this Subtopic, universal life-type contracts include contracts that provide either death or annuity benefits and are characterized by any of the following features:

a. One or more of the amounts assessed by the insurer against the policyholder, including amounts assessed for mortality coverage, contract administration, initiation, or surrender, are not fixed and guaranteed by the terms of the contract.

b. Amounts that accrue to the benefit of the policyholder, including interest accrued to policyholder balances, are not fixed and guaranteed by the terms of the contract.

c. Premiums may be varied by the policyholder within contract limits and without consent of the insurer.

If the mortality or morbidity risks are other than nominal, the fees assessed for insurance benefits and the amounts that accrue to the policyholder are not fixed and guaranteed, and the premiums vary within contract limits and without the consent of the insurer, then the contract should be classified as a long-duration universal life-type contract.

According to ASC 944-20-15-12, contracts providing insurance benefits other than death or annuity benefits, such as disability benefits, but that meet one of the three criteria in ASC 944-20-15-26, should also be accounted for under the universal life-type model. In addition, ASC 944-20-15-27 through ASC 944-20-15-30 note that certain types of contracts that in form are "participating contracts" may be considered universal-life type contracts.

A principal component of most universal life-type contracts is an account balance on which interest is credited to p0licyholders and from which assessments are deducted for mortality (or other insurance) risk and contract administration. In the absence of a stated account balance or a similar explicit or implicit contract value, the cash surrender value measured as of the balance sheet date should be accrued. However, in the event it is determined that only the cash surrender value should be accrued, it may be appropriate to reconsider the product classification. Generally, a significant and flexible investment component is incorporated into each universal life-type product, and it is unlikely that a universal life-type policy could function without maintaining at least an implicit account balance.

Under the universal life-type accounting model:

- Revenue consists of mortality (or other insurance) fees and contract administration assessments and is recognized when due. Premiums are considered deposits and n0t recognized as revenue.

- Fees and assessments collected in advance of the service rendered are deferred and recognized over the periods benefited.

- The account balance is recognized as a liability. The liability is updated each period for fee and assessment deductions and increased for interest or returns credited to the account balance. Persistency bonuses are accrued as a liability over the period preceding the bonus crediting.

- Insurance benefits (e.g., death or surrender benefits) in excess of the account balance are generally recognized as expenses in the period incurred unless the design of the product is such that future charges are insufficient to cover the benefits, in which case an additional liability is accrued over the life of the contract.

- Eligible deferred acquisition costs are capitalized and amortized to expense each period on a straight-line basis over the expected term of the related contracts.

- Premiums deposited and withdrawals are classified as financing cash flows in the statement of cash flows. There is diversity in practice in how interest credited is presented in the statement of cash flows; it may be presented as either operating or financing. Excess payments upon death are treated as operating cash outflows.

These contracts sometimes include market risk benefits and embedded derivatives that require bifurcation and fair value accounting either under ASC 944 or under ASC 815, respectively, as described more fully in IG 5.6 and IG 5.7. Guidance related to accounting and reporting by insurance enterprises for certain nontraditional long-duration contracts and for separate accounts is provided in the universal life-type contracts and nontraditional contract benefits subsections of ASC 944-40-25 (see IG 5.8).

2.4.4 *Variable annuity and life insurance – classification*

Variable annuity and life products are considered universal life contracts under ASC 944 and use the accounting model described in IG 2.4.3. The contract holder's payments (deposits) are credited to a policyholder account balance or account value. This balance is credited with results of investment return allocations, which may be positive or negative as the policyholder bears the investment risk of the allocation chosen. The contract holder directs the allocation of the account value among various investment alternatives in the form of notional units in each alternative. Typical investment allocations include mutual funds and other equity securities, debt securities, mortgage loans, and real estate. The contract may be surrendered for the current value of the notional units (typically less a surrender charge). After a specified period of time, the policyholder may elect to apply the account value to purchase a payout annuity, which is treated as a separate contract at the annuity purchase date.

In order to hedge and keep track of the investment returns owed to the policyholder, the insurance company invests in investment alternatives selected by the policyholder using a separate account structure. A separate account is a separate investment account established and maintained within an insurance entity under specific state insurance laws and regulations. Its assets are recorded as "separate account assets" in an insurer's balance sheet as they are owned by the insurance company.

2.4.4.1 *Insurance company separate account – classification*

Separate account structures, such as the ones used to support variable annuity and life contracts, have to meet the specified criteria in ASC 944-80-25-2 in order to apply the separate account guidance in ASC 944-80. The criteria include being insulated legally from the insurer's general account liabilities and passing all investment performance through to the contact holder. The separate account accounting model in ASC 944-80 is as follows:

- Separate account assets are measured at fair value through income and reported as a summary total, with an equivalent summary total reported for separate account liabilities.

- Related investment performance and the corresponding amounts credited to the contract holder are offset in the same line in the statement of operations, netting to zero.

2.4.4.2 *Variable annuity and life with guarantees – classification*

Many variable annuity contracts have been enhanced to offer protection against the downside risk borne by contract holders from the selected investment alternatives. The amount of protection provided and the triggers for payment of the additional "guaranteed minimum benefit" (or GMXB) vary and may be offered in different combinations.

Some GMXBs may provide that the policyholder benefits will not be less than the amount of deposits less withdrawals. Other GMXBs provide for a specified rate of return on that amount (often referred to as a "roll up"). Still others provide that the amount will be equal to a specified anniversary date value (often referred to as a "reset") or the highest anniversary value (often referred to as a "ratchet").

GMXBs may be paid to contract holders or their beneficiaries based upon different events:

- Guaranteed minimum death benefit (GMDB): provides the beneficiary a guaranteed minimum amount upon the death of the contract holder, regardless of the available account balance

- Guaranteed minimum income benefit (GMIB): provides the contract holder a guaranteed minimum amount available to annuitize, regardless of the available account balance

- Guaranteed minimum accumulation benefit (GMAB): provides the contract holder a guaranteed minimum amount of account balance at the end of a specified period, regardless of the available account balance

- Guaranteed minimum withdrawal benefit (GMWB): provides the contract holder a specified percentage (e.g., 7%) of a guaranteed minimum amount that can be withdrawn annually until that guaranteed amount is depleted, regardless of the available account balance

- Guaranteed minimum withdrawal benefit for life (GMWBL): provides the contract holder a specified percentage (e.g., 5%) of a guaranteed minimum amount that can be withdrawn annually for life, regardless of the available account balance

Some of these GMXBs features may be market risk benefits that require fair value accounting under ASC 944 or embedded derivatives that require bifurcation under ASC 815. See IG 2.4.5 for further guidance on market risk benefits and DH 4.6.2 for further guidance on bifurcation of embedded derivatives. IG 2.4.5, IG 5.6, and IG 5.7 provides further guidance on initial and subsequent measurements of market risk benefits and embedded derivatives in insurance and investment contracts.

2.4.5 *Classification of market risk benefits*

The market risk benefit (MRB) is an amount that a policyholder receives in addition to the account balance upon the occurrence of a specific event or circumstance, such as death, annuitization, or periodic withdrawal that involves protection from capital market risk.

ASC 944-40-25-25C introduces the term MRB.

ASC 944-40-25-25C

A contract or contract feature that both provides protection to the contract holder from other-than-nominal capital market risk and exposes the insurance entity to other-than-nominal capital market risk shall be recognized as a market risk benefit.

Features that meet the definition of MRBs are accounted for at fair value. The portion of the fair value change attributable to a change in the instrument-specific credit risk of the written MRB is recognized in other comprehensive income and not in net income. MRB balances and changes in their measurement are presented separately in the statement of financial position and the statement of operations.

Market risk benefits can be present in variable and fixed annuity contracts and in certain life insurance contracts. ASC 944-40-25-25D (b) notes that an MRB does not include the death benefit component of a life insurance contract (i.e., the difference between the account balance and the death benefit amount). However, an MRB may be present in a life insurance contract if it provides for protection from capital market risk for other benefits, for example, a GMAB or GMWB on a variable universal life insurance contract. MRBs may also be present in universal life insurance contracts that provide for an option to settle the contract upon surrender or death with an annuity determined using guaranteed fixed interest rates.

MRB features in contracts include various guaranteed minimum benefits (GMXBs), such as guaranteed minimum death benefits (GMDBs) in annuity contracts and guaranteed minimum income benefits (GMIBs), which were previously accounted for under a model that recognizes the cost of these features over the life of the contracts. MRB features also include guaranteed minimum accumulation benefits (GMABs) and guaranteed minimum withdrawal benefits (GMWBs) previously accounted for as embedded derivatives, as well as GMWB for life benefits, for which there was previously diversity in accounting practice. For variable annuity contracts, the host contract will continue to be measured under existing guidance in ASC 944-80-25-3, which requires that a liability be recorded equal to the summary total of the fair value of the assets held in the separate account for the policyholder. For fixed annuity contracts, the debt host follows financial instrument accounting. See IG 5.6.1 for further discussion.

ASC 944-40-25-25D further establishes what is an MRB.

ASC 944-40-25-25D

In evaluating whether a contract or contract feature meets the conditions in paragraph 944-40-25-25C, an insurance entity should consider that:

a. Protection refers to the transfer of a loss in, or shortfall (that is, the difference between the account balance and the benefit amount) of, the contract holder's account balance from the contract holder to the insurance entity, with such transfer exposing the insurance entity to capital market risk that would otherwise have been borne by the contract holder (or beneficiary).

b. Protection does not include the death benefit component of a life insurance contract (that is, the difference between the account balance and the death benefit amount). This condition does not apply to an investment contract or an annuity contract (including an annuity contract classified as an insurance contract).

c. A nominal risk, as explained in paragraph 944-20-15-21, is a risk of insignificant amount or a risk that has a remote probability of occurring. A market risk benefit is presumed to expose the insurance entity to other-than-nominal capital market risk if the benefit would vary more than an insignificant amount in response to capital market volatility.

ASC 944-40-25-25D(a) notes that protection refers to the transfer of a loss in, or shortfall of, the contract holder's account balance and clarifies that "loss in, or shortfall of" is the difference between the account balance and the benefit amount. Despite the connotation of "loss in, or shortfall of" as protecting against a loss to the account balance, the MRB definition includes any difference between the account balance and the guaranteed benefit amount. The guaranteed benefit is an amount that a policyholder would receive in addition to the account balance upon the occurrence of a specific event or circumstance, such as death, annuitization, or periodic withdrawal. For example, a fixed-indexed annuity product that has a guaranteed minimum death benefit that pays a return that is two times the investment returns credited to the account balance is deemed to be providing "protection" to the policyholder's account balance even though the account balance may not have incurred an investment loss.

The "death benefit component of a life insurance contract" exclusion in ASC 944-40-25-25D(b) is referencing the legal policy form of the contract (i.e., a life insurance contract rather than an annuity contract). It is not focusing on the accounting classification of the contract under ASC 944 (i.e., insurance contract or an investment contract). As such, the death benefit components of traditional universal life and variable life products are not considered MRBs.

A contract or contract feature is presumed to have other-than-nominal capital market risk if the cash flows related to the contract or contract feature will vary significantly in response to capital market volatility. Nominal risk is defined in ASC 944-20-15-21 as a risk of insignificant amount or remote probability of occurring. The FASB's master glossary notes that capital market risk includes price, interest rate, and foreign exchange risk.

Question IG 2-1 discusses how to consider contract holder utilization in the analysis of an MRB.

Question IG 2-1

Can expected contract holder utilization (i.e., incidence or likelihood of contract holder election of a feature) be factored into the analysis of determining if an MRB exists (i.e., in assessing whether the insurance entity is subject to/contract holder is protected from other-than-nominal capital market risk)?

PwC response

No. Expected contract holder utilization is not considered when assessing if a contract or contract feature exposes the insurance entity to other-than-nominal capital market risk under the MRB guidance. ASC 944-40-25-25D(c) provides that a nominal risk, as explained in paragraph ASC 944-20-15-21, is a risk of insignificant amount or a risk that has a remote probability of occurring. A market risk benefit is presumed to expose the insurance entity to other-than-nominal capital market risk if the benefit would vary more than an insignificant amount in response to capital market volatility. The assessment as "other than nominal" is performed as if the contract holder elected the benefit and thus the criterion of "more than a remote probability of occurring" excludes expectations of contract holder

behavior. That is, the fact that contract holder election is remote does not impact the assessment of whether the market risk benefit, if elected, could be significant. However, in the event that the annuitization benefit is determined to be an MRB, the expected contract holder utilization should be considered in the determination of the fair value of the feature as market participants would consider it.

Question IG 2-2 discusses if two-tier annuities should be assessed as MRBs.

Question IG 2-2

Should two-tier annuity contracts be assessed under the MRB guidance in ASC 944-40-25-25C and ASC 944-40-25-25D?

PwC response

Yes. Two-tiered annuities provide potential benefits in addition to the account balance that are payable only upon annuitization. Two-tier annuities are required to be assessed under the MRB guidance. ASC 944-40-35-20 states that for two-tier annuities, an additional liability recognized in accordance with ASC 944-40-25-26 through ASC 944-40-25-27 or a market risk benefit, as applicable, should be recognized during the accumulation phase for the benefit in excess of the accrued account balance. A two-tier annuity that contains a feature that both provides protection to the contract holder from other-than-nominal capital market risk and exposes the insurance entity to other-than-nominal capital market risk is recognized as a market risk benefit.

2.4.5.1 *Reinsurance contracts in scope of MRBs*

Market risk benefits can be present in contracts written by both insurance and reinsurance entities. A reinsurance entity may assume all or a portion of market risk benefits associated with various GMXB features. ASC 944-40-25-40 clarifies that both the assuming reinsurance entity and the ceding entity are subject to the MRB guidance. The account balance for purposes of the assessment of whether the reinsurance contract is or contains an MRB in accordance with ASC 944-40-25-25D refers to the underlying contract between the direct insurance entity and the contract holder. Refer to IG 9.8 for additional considerations regarding the reinsurance of market risk benefits.

2.4.5.2 *Classification of MRB – interaction with ASC 815 and other guidance*

ASC 944-40-25-25B provides the order of analysis when assessing contract features that provide potential benefits in addition to the account balance to determine whether the additional benefits are MRBs, derivatives or embedded derivatives, or additional annuitization, death, or other insurance benefits.

Classification is important due to the differences in measurement between the models. Like derivatives, MRBs have capital market risk and are recorded at fair value. However, under derivative accounting, the entire change in fair value is recorded through income, whereas for MRBs, the portion of the change in the value due to changes in instrument-specific credit risk is recognized in OCI. The application of the MRB guidance may result in a feature that was previously recognized as a derivative

now being recognized as an MRB (or a component of an MRB). In addition, certain features may have capital market risk, such as interest rate risk, but may not meet the definition of either an MRB or a derivative because the features are not an amount in addition to the account balance (e.g., a variable interest rate return on a fixed annuity or universal life account balance) or they may be life insurance benefits in a life insurance contract.

The scope exception guidance in ASC 815-10-15-13, which indicates contracts not subject to the derivative guidance in ASC 815, has been expanded to include market risk benefits in addition to the existing exclusion for insurance contracts.

Figure IG 2-1 Part C provides a decision tree for determining the accounting model for contract features in insurance and investment contracts that provide potential benefits in addition to the account balance, as detailed in ASC 944-40-25-25B.

2.4.5.3 Classification of MRB - types of market risk benefits

Periodic interest crediting features applied to account balances are not considered MRBs. This includes features in which the interest crediting is directly or indirectly linked to the performance of an underlying portfolio of investments or an equity index (e.g., variable annuities and universal life) and those for which there is a guaranteed minimum interest crediting rate on the account balance (e.g., deferred fixed annuities). The interest crediting feature and guaranteed minimum interest rate do not provide a benefit to the contract holder in addition to the account balance, but instead are defining the return provided on the account balance. The interest crediting feature simply provides that the policyholder account balance will be credited with a return that can be positive, negative, or zero depending on the crediting feature. For certain products, such as fixed-indexed annuities with interest crediting rates linked to an equity index, the interest crediting feature of the contract is not considered an MRB and will continue to be accounted for as embedded derivatives under ASC 815.

A traditional annuitization guarantee in a deferred annuity product (i.e., contract specifies the mortality table and the interest rate to be used to determine future annuity payments using the account balance as the base) is an MRB if the insurance entity is exposed to other-than-nominal capital market risk. The feature is providing "protection" from the difference between the periodic payment promised by the annuitization guarantee and the account balance and is economically similar to a variable annuity with a GMIB. However, if the annuitization guarantee only locks in the mortality table, but the interest rate to be used to calculate the annuitization payments will be based on market rates at the future annuitization date, there is no MRB feature because the contract holder is not protected from capital market risk.

Figure IG 2-2 provides examples of some common products issued by insurance and reinsurance entities that may have features with capital market risk and analyzes whether such contract features would meet the definition of an MRB.

Figure IG 2-2

Analysis of MRB for common products and features for market risk benefit accounting

Base product	Benefit feature	Benefit feature previous accounting model	Market risk benefit under ASC 944-40-25-25C and 25D? (if no, follow previous accounting model)
Annuity contracts			
Fixed annuity	Interest crediting rate on the account balance at the discretion of the insurance entity that is often indirectly based on return on unspecified general account assets with a contractually-specified guaranteed minimum interest crediting rate	ASC 944-825-25-1 to ASC 944-825-25-2	No. The interest crediting feature is not providing a potential benefit in addition to the account balance.
Fixed annuity-market value adjusted annuity	The contract provides for a return of principal plus a fixed rate of return if held to maturity, or alternatively, a market-adjusted value if the surrender option is exercised by the contract holder before maturity. The market-adjusted value is typically based on current interest crediting rates being offered for new market value annuity purchases.	ASC 944-40-25-25	No. The surrender feature is not providing a potential benefit in addition to the account balance. Amount received upon surrender is account balance adjusted for interest rate changes; contract holder is in effect absorbing capital market risk rather than being protected from it.
Fixed-indexed annuity (FIA)/ Equity-indexed annuity (EIA)	Interest crediting rate on the account balance is based on performance of an equity index (e.g., S&P 500) with a contractually-specified minimum interest crediting rate	ASC 815-15	It depends on the termination provisions of the contract. If the equity index crediting earned to date is available upon surrender at any time, the equity index crediting is part of the account balance and is an embedded derivative. If the equity index crediting is only available after some specified period, or only upon death, it is an amount in addition to the account balance and may be an MRB.
Variable-indexed annuity	Interest crediting rate on the account balance based on performance of an equity index (e.g., S&P 500). Interest crediting rate may be negative and may have a "buffer" in which the	ASC 815-15	The analysis is the same as the preceding product; it depends on the termination provisions of the contract.

Base product	Benefit feature	Benefit feature previous accounting model	Market risk benefit under ASC 944-40-25-25C and 25D? (if no, follow previous accounting model)
	insurance entity absorbs certain downside risk (e.g., first 10% loss) with remaining risk with contract holder.		
Fixed-indexed annuity (FIA)/ Equity-indexed annuity (EIA)/ Variable-indexed annuity	GMXBs (i.e., GMDB, GMIB, GMAB, GMWB, GMWB for life)	ASC 944-40-30-26 to ASC 944-40-30-29 or ASC 815-15 (varies based on feature)	Yes. These guarantee features are providing a potential benefit in addition to the account balance for difference between the guaranteed benefit and the account balance.
Deferred fixed annuity	Annuitization guarantee provides calculation of annuitization periodic payments based on guaranteed minimum interest rate as described in ASC 815-15-55-58.	ASC 944-40-30-26 to 944-40-30-29	Yes, if the risk is other-than-nominal at inception; expected utilization is not considered when making the assessment. The guarantee feature is providing a potential benefit in addition to the account balance for the difference between the guaranteed benefit (i.e., periodic payments promised by the annuitization guarantee) and the periodic payments using current interest rates.
Deferred variable annuity	Interest crediting rate on the account balance is equal to investment returns from designated investment funds.	ASC 944-80-25-3a	No. The interest crediting feature is not providing a potential benefit in addition to the account balance.
Deferred variable annuity with GMXBs, reinsurance of GMXB features	GMXBs (i.e., GMDB, GMIB, GMAB, GMWB, GMWB for life)	ASC 944-40-25-26 to ASC 944-40-25-27A or ASC 815 (various based on specific feature)	Yes. These guarantee features are providing protection to the contract holder (or cedant) for the difference between the guaranteed benefit and the account balance.
Variable immediate payout annuity	Periodic annuity payments will vary based on the investment performance of related separate account fund. Payments may be period certain or life-contingent.	Period certain payments: ASC 944-825-25-1 to 25-2; Life-contingent payments: ASC	No. The MRB guidance applies to contracts with an account balance. A payout annuity has no account balance and there is only one benefit.

Base product	Benefit feature	Benefit feature previous accounting model	Market risk benefit under ASC 944-40-25-25C and 25D? (if no, follow previous accounting model)
		944-40-30-7	
Variable immediate payout annuity with minimum guaranteed periodic payments	Periodic annuity payments will vary based on the investment performance of related separate account fund with a contractually-specified guaranteed minimum annuity payment floor. Payments may be period certain or life-contingent.	Period certain payments: ASC 815-15; Life-contingent payments: ASC 944-40-30-7	No. The MRB guidance applies to contracts with an account balance. A payout annuity has no account balance and there is only one benefit. Period certain guarantee is an embedded derivative.
Life insurance products			
Universal life	Interest crediting rate on the account balance at the discretion of the insurance entity, often indirectly based on return on unspecified general account assets. Contract may or may not provide guaranteed minimum interest crediting rate.	ASC 944-40-30-16 to ASC 944-40-30-19	No. The interest crediting feature is not providing a potential benefit in addition to the account balance.
Universal life	A no lapse guarantee/universal life secondary guarantee, where the death benefit remains in force even if the account balance is insufficient to pay the cost of insurance assuming minimum funding requirements are met.	ASC 944-40-30-20 to ASC 944-40-30-24	No. The death benefit component of a life insurance product is excluded from the scope of the MRB guidance.
Universal life	Interest crediting rate on the account balance is based on performance of an equity index (e.g., S&P 500).	ASC 815-15	It depends on the termination provisions of the contract. If the equity index crediting earned to date is available upon surrender at any time, the equity index crediting is part of the account balance and is an embedded derivative. If the equity index crediting is only available after some specified period, it is an amount in addition to the account balance and may be an MRB.
Universal life	Death benefit is based on the performance of an equity index.	ASC 944-40-30-20 to ASC 944-40-30-24	No. The death benefit component of a life insurance product is excluded from the

Base product	Benefit feature	Benefit feature previous accounting model	Market risk benefit under ASC 944-40-25-25C and 25D? (if no, follow previous accounting model)
			scope of the MRB guidance.
Universal life	An option to settle the contract upon surrender or death with an annuity determined using guaranteed fixed interest rates.	ASC 944-40-25-26 to ASC 944-40-25-27A	Yes. The annuitization option is providing protection for the difference between the guaranteed benefit and the account balance.
Variable universal life	Interest crediting rate on the account balance is equal to investment returns from designated investment funds.	ASC 944-80-25-3a	No. The interest crediting component does not provide a potential benefit in addition to the account balance.
	Upon death, in one version of the product, the policyholder receives the greater of account balance and fixed death benefit; in another version, the policyholder receives the account balance plus the fixed death benefit.	ASC 944-40-30-16 to ASC 944-40-30-19	No. The death benefit component of a life insurance product is excluded from the scope of the MRB guidance.
Variable universal life	Benefits other than death benefits, for example, a GMAB or GMWB on the account balance component	ASC 944-40-25-26 to ASC 944-40-25-27A or ASC 815 (various based on specific feature)	Yes. The benefit is providing protection for the difference between the guaranteed benefit and the account balance.

2.4.6 *Classification of participating life insurance contracts*

Participating life insurance contracts include certain contracts issued by mutual life insurance entities and certain stock life insurance entities that have both of the following characteristics, as described in ASC 944-20-15-3.

ASC 944-20-15-3(b)

Participating life insurance contracts denote those that have both of the following characteristics:

1. They are long-duration participating contracts that are expected to pay dividends to policyholders based on actual experience of the insurance entity.

2. Annual policyholder dividends are paid in a manner that both:

a) Identifies divisible surplus

b) Distributes that surplus in approximately the same proportion as the contracts are considered to have contributed to divisible surplus (commonly referred to in the actuarial literature as the contribution principle).

The participating insurance contract accounting model is viewed as a hybrid of the traditional long-duration and universal life-type models:

- Premium revenue is recognized when due.
- A liability for future policyholder benefits is recorded as the present value of estimated future policy benefits and related expenses less the present value of estimated future net premiums (benefits and related expenses) using locked-in assumptions, along with a terminal dividend liability, when applicable.
- Unlike the traditional model, mortality and discount rates used to calculate the liability for future policy benefits are based on contractual terms and are not related to actual or anticipated experience. In this way, the liability for future policyholder benefits is meant to be a proxy for the universal life-type contract account balance liability, as participating life insurance contracts typically do not have a stated account balance.
- Annual dividends are accrued as a policyholder expense as declared.
- Eligible deferred acquisition costs are capitalized and amortized on a straight-line basis over the expected term of the related contracts.

Some participating contracts were isolated for regulatory cash flow purposes when mutual life insurers demutualized. This isolation structure is called a "closed block." ASC 944-805 provides guidance on the specialized accounting for demutualization and closed block transactions.

2.5 Classification of other insurance contracts

This section addresses the accounting considerations for contracts that are not accounted for as long-duration insurance contracts.

2.5.1 Classification of investment contracts

Investment contracts are those contracts written by an insurer that do not subject the insurer to significant mortality or morbidity risk. An example is a guaranteed investment contract (GIC) or similar debt-like instrument under which funds are received from contract holders and accrue interest at a stated rate, which can be fixed or variable.

Certain annuities may qualify as investment contracts. Some annuities have a deferral (or "accumulation") phase and a payout phase. The accumulation phase is the period in which deposits are received from contract holders and an account balance is credited with interest until maturity or a payout annuity is elected with the right to surrender the contract at any time for cash. If there are no death or other insurance benefit riders, and thus no insurance risk, the contract is classified as an investment contract (e.g., fixed annuities and fixed (equity) indexed annuities in the accumulation phases).

In contrast, the payout or "annuitization" phase of an annuity, i.e., the period during which the contract holder is receiving periodic payments, is a separate contract for accounting purposes, as noted in ASC 944-20-15-17.

> ASC 944-20-15-17
>
> A contract provision that allows the holder of a long-duration contract to purchase an annuity at a guaranteed price on settlement of the contract does not entail a mortality risk until the right to purchase is executed. If purchased, the annuity is a new contract to be evaluated on its own terms.

At the annuitization date, the payout annuity is classified as an investment contract if the periodic payments are for a "period certain" rather than life contingent.

Certain reinsurance contracts that reinsure directly written investment contracts or that reinsure directly written insurance contracts but fail to pass significant insurance risk to the reinsurer would also be classified as investment contracts, as further described in IG 2.5.1.

Under the investment contract accounting model:

- Payments received are reported as liabilities and accounted for in a manner consistent with the accounting for interest-bearing or other financial instruments.
- Eligible deferred acquisition costs are capitalized and amortized to expense on a straight-line basis over the expected term of the related contracts if specified criteria are met, otherwise using a constant effective yield method.
- Deposits received and withdrawal payments are classified as financing cash flows in the statement of cash flows.

These contracts may contain embedded derivatives that require bifurcation under ASC 815, as described more fully in IG 1.2.4.

See IG 5.5 for further information on investment contracts.

2.5.2 *Classification of assumed or written reinsurance contracts*

Reinsurance is a transaction in which an insurer (assuming entity), in exchange for consideration (premium), assumes all or part of a risk undertaken originally by another insurer (ceding entity or cedant). Regardless of its form, any transaction that indemnifies an insurer against loss or liability relating to insurance risk and meets the specified risk transfer criteria is subject to reinsurance accounting.

ASC 944 guidance on reinsurance focuses principally on:

- Determining whether significant risk transfer has passed between the cedant and the assuming company (as described further in IG 8.5 and IG 9.5) and
- Accounting by the cedant for purchased reinsurance that meets the risk transfer criteria.

No specific guidance is provided in ASC 944 for the accounting by the assuming entity since the assuming entity is in substance providing insurance protection to the ceding company. Reinsurance contracts assumed follow the applicable guidance for direct insurance contracts, including short duration and long duration classifications.

See IG 8 for further guidance on the short-duration reinsurance model and IG 9 for further guidance on the long-duration reinsurance model.

Reinsurance of other types of coverage, such as financial guarantee, is not explicitly covered in ASC 944. In practice, such transactions are accounted for by analogy to the reinsurance guidance in ASC 944.

Chapter 3:
Acquisition costs

3.1 Acquisition costs — chapter overview

Insurance entities incur costs relating to the acquisition of new and renewal insurance contracts. Acquisition costs are often substantial, especially for life insurance entities when significant upfront commissions (as well as other acquisition related costs) are incurred in the process of underwriting long-duration contracts that have substantial future recurring premium payments.

Insurance entities are required to defer acquisition costs that meet certain specified criteria and charge them to expense over the lives of the related policies.

This chapter provides guidance relating to:

- the types of costs that are deferrable as DAC
- the DAC amortization methods
- the types of sales inducements that are deferrable
- the impact on DAC of internal replacements (i.e., transactions in which product benefits, features, rights, or coverages are modified)
- DAC considerations for reinsurance contracts

3.2 Acquisition costs — scope and relevant guidance

ASC 944-30*, Acquisition Costs,* establishes requirements for the accounting for and financial reporting of acquisition costs. This includes related considerations for internal replacement transactions (i.e., when a product benefit or feature is modified) and reinsurance.

The types of costs that are deferrable are consistent among the various insurance models (i.e., short-duration, long-duration, financial guarantee and title insurance). See IG 2 for a description of the various models. In addition, although investment contracts issued by insurance entities lack insurance risk, the types of costs related to these contracts that are deferrable follows the DAC guidance. Although the types of costs that are deferrable is uniform among the various types of insurance and investment contracts, the method of amortization varies depending on the specific insurance model classification, as further described in IG 3.5.

3.2.1 *Acquisition costs for contracts accounted for at fair value*

Certain contracts issued by insurance entities may be subject to the provisions of ASC 815, *Derivatives and Hedging*. These contracts are measured at fair value; thus, DAC would not be established in conjunction with these contracts. Similarly, acquisition costs for insurance contracts that have been elected to be measured at fair value under the fair value option would also not be deferred and instead would be recognized as an expense in the period incurred.

3.3 Acquisition costs — unit of account and "grouping"

In general, the unit of account for initial and subsequent measurement of insurance and investment contracts is the individual contract, unless indicated otherwise. For certain purposes, including the

allocation of DAC for initial deferral purposes, insurance contracts are required or allowed to be grouped.

ASC 944-30-25-1B provides guidance on the grouping of short-duration insurance contracts for the allocation of DAC at initial deferral. Contracts issued in the same period are typically grouped together. In practice, the "same period" may be considered to be the same quarter, or in some cases, the same year.

ASC 944-30-25-1B

To associate acquisition costs with related premium revenue, for acquisition costs that are charged to expense in proportion to premium revenue recognized under Subtopic 944-605, capitalized acquisition costs shall be allocated by groupings of insurance contracts consistent with the entity's manner of acquiring, servicing, and measuring the profitability of its insurance contracts.

ASC 944-30-35-3A provides guidance on the grouping for long-duration contracts. For purposes of the DAC amortization, contracts may be grouped consistent with the grouping used in estimating the liability for future policy benefits (or any other related balance) for the corresponding contracts and thus would be subject to the same annual cohort limitation required in ASC 944-40-30-7. However, DAC may also be amortized on an individual contract basis.

3.4 Deferrable acquisition costs and initial measurement

ASC 944-30-25-1A and ASC 944-30-25-1AA include four categories of acquisition costs that may be deferred.

ASC 944-30-25-1A

An insurance entity shall capitalize only the following as acquisition costs related directly to the successful acquisition of new or renewal insurance contracts:

a. Incremental direct costs of contract acquisition.

b. The portion of the employee's total compensation (excluding any compensation that is capitalized as incremental direct costs of contract acquisition) and payroll-related fringe benefits related directly to time spent performing any of the following acquisition activities for a contract that actually has been acquired:

(1) Underwriting

(2) Policy issuance and processing

(3) Medical and inspection

(4) Sales force contract selling.

c. Other costs related directly to the insurer's acquisition activities in (b) that would not have been incurred by the insurance entity had the acquisition contract transaction(s) not occurred.

ASC 944-30-25-1AA

The costs of direct-response advertising shall be capitalized if both of the following conditions are met:

a. The primary purpose of the advertising is to elicit sales to customers who could be shown to have responded specifically to the advertising. Paragraph 944-30-25-1D discusses the conditions that must exist in order to conclude that the advertising's purpose is to elicit sales to customers who could be shown to have responded specifically to the advertising.

b. The direct-response advertising results in probable future benefits. Paragraph 944-30-25-1G discusses the conditions that must exist in order to conclude that direct-response advertising results in probable future benefits.

All of the types of acquisition costs that are eligible for deferral share the attribute of being directly related to a sale. For a cost to be considered direct, it must result directly from and be essential to the contract acquisition or renewal. Certain costs incurred by an entity, such as rent, equipment, and general overhead, are considered indirect costs of contract acquisition, as these costs do not result directly from and are not essential to the contract transaction and would have been incurred regardless of whether or not the insurance policy was issued. Indirect costs must be charged to expense as incurred.

The following sections provide an overview of each of the four categories of potentially deferrable costs.

3.4.1 Incremental direct costs of a contract acquisition

A cost to successfully acquire an insurance contract must have both of the following characteristics in order to be deferred:

- The cost results directly from, and is essential to, the contract transaction
- The cost would not have been incurred by the insurance entity had the contract transaction not occurred

ASC 944-30-55-1 describes these costs as including the following:

- An agent/broker commission or bonus for successful policy issuance
- Medical and inspection fees for successful policy issuance

These costs are variable in nature and relate directly to a contract acquisition and are incremental, as the commission, bonus, or other inspection costs would not have been incurred had the policy or policies not been issued. Such costs may be deferred regardless of whether they are incurred in transactions with employees, non-employees, or other parties.

Although not specifically mentioned in the guidance, most premium taxes qualify for deferral. Premium taxes are amounts assessed on insurers by states, and are calculated based on the amount of premium paid by residents of the state to the insurance entity. Tax rates may vary by state and type of insurance entity, but are applied to the premiums collected by the insurer in determining the total tax

expense incurred. By analogy, we believe excise taxes calculated based on contract sales would also be eligible for deferral.

Question IG 3-1 addresses whether a sales bonus is a direct cost.

Question IG 3-1

Insurance Company pays sales agents a $5,000 bonus upon the sale of the agent's 100th policy. May Insurance Company defer this bonus as an incremental direct cost of contract acquisition?

PwC response

Yes. ASC 944-30-55-1 provides that an insurance entity may fully defer an agent or broker commission or bonus for successful contract acquisition or acquisitions as an incremental direct cost of contract acquisition. Although the agent must sell 100 policies in order for Insurance Company to incur this cost, the $5,000 bonus is incremental and direct to the 100th policy.

Question IG 3-2 addresses whether a bonus paid under a variable bonus structure can be deferred.

Question IG 3-2

Insurance Company pays an agent a bonus based on achieving a specified sales target in a given year (e.g., $150,000 in sales), but with the amount of the bonus varying depending on a second variable, such as the loss ratio of the contracts brought in by the agent. For example, the bonus will be $3,000 if a 90% loss ratio is achieved, $4,000 if an 80% loss ratio is achieved, and $5,000 if a 70% loss ratio is achieved. May Insurance Company defer this bonus as an incremental direct cost of acquisition?

PwC response

Probably. We view these sliding scale bonus arrangements as "dual trigger" contracts. In this case, the payment is based on sales, but the amount of the commission is partially based on another variable. We do not believe that the fact that the measurement is based in part on another variable would preclude an entity from deferring the bonus. However, in order to be deferrable, the primary driver of the bonus should be reaching the sales target, and that target should be substantive and not at such a low level as to virtually guarantee achievement.

3.4.2 *Employee compensation and fringe benefits*

The portion of employees' total compensation and payroll-related fringe benefits directly related to time spent performing the following activities for which an insurance policy was issued (often referred to as "successful efforts") is deferred:

- Underwriting
- Issuing and processing policies
- Performing medical and other inspections
- Selling insurance contracts

The portion of compensation to be deferred excludes any compensation that is otherwise deferred as an incremental direct cost of contract acquisition in ASC 944-30-25-1A(a), as discussed in IG 3.4.1. The portion of internal selling agent and underwriter fixed salaries and benefits attributable to unsuccessful efforts is expensed as incurred.

ASC 944-30-55-1C defines payroll-related fringe benefits and provides examples of such benefits.

ASC 944-30-55-1C

Payroll-related fringe benefits include any costs incurred for employees as part of the total compensation and benefits program. Examples of such benefits include all of the following:

a. Payroll taxes

b. Dental and medical insurance

c. Group life insurance

d. Retirement plans

e. 401(k) plans

f. Stock compensation plans, such as stock options and stock appreciation rights

g. Overtime meal allowances.

Example IG 3-1 analyzes employee compensation costs eligible for deferral when compensation includes vacation pay.

EXAMPLE IG 3-1

Determination of employee compensation costs eligible for deferral when compensation includes vacation pay

Insurance Company has a direct sales employee with total compensation of $100,000, including vacation pay. The employee works 1,800 hours in the current year engaged only in successful direct sales activities and the employee's remaining 200 hours are vacation time. 80% of the employee's hours were for successful efforts after considering vacation time. What portion of this employee's compensation is eligible for deferral?

Analysis

We believe that vacation pay can be considered a payroll-related fringe benefit. However, vacation *time* is viewed as idle time (i.e., time employees are not actively involved in acquisition efforts), and as such, vacation time should be factored into the computation of employee successful efforts.

Therefore, the portion of the employee's total compensation eligible for deferral as DAC would be $80,000 ($100,000 X 80% success rate).

For pension-related compensation, the components of net periodic benefit cost eligible to be deferred as part of employee compensation and payroll-related fringe benefits directly related to successful contract acquisitions is limited to the service cost component. Although this is not explicit in ASC 944, ASC 330-10-55-6A notes that the service cost component of net periodic pension cost and net periodic postretirement benefit cost is the only component directly arising from employees' services provided in the current period and therefore is the relevant amount to be considered for deferral.

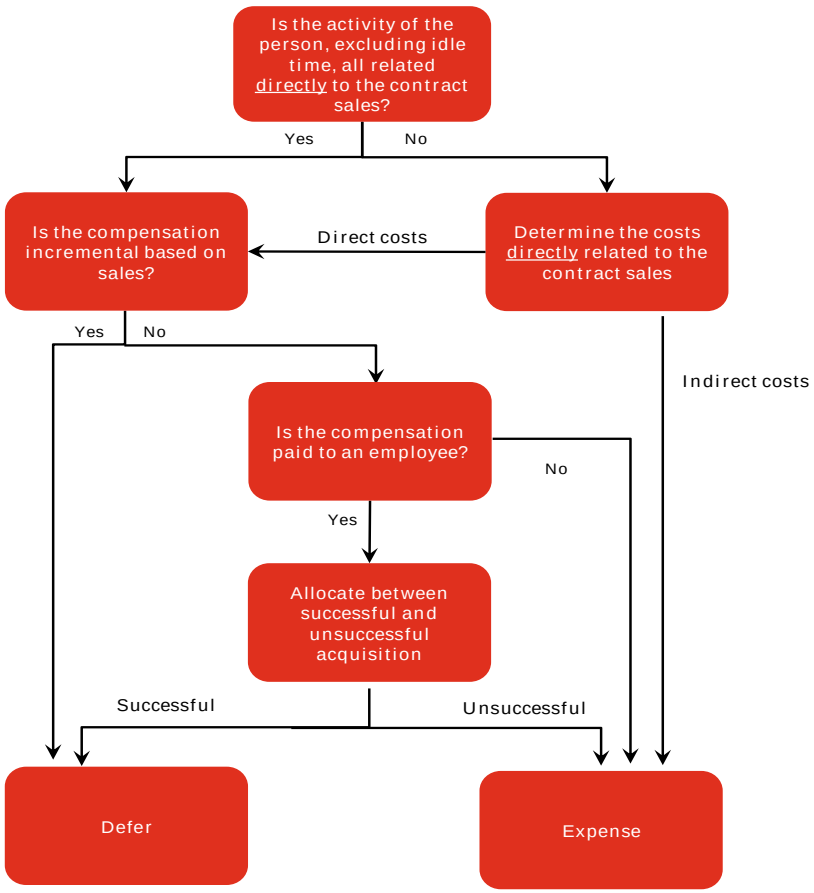
In some cases, the identification of deferrable acquisition costs is straightforward (e.g., commissions paid to the direct sales agent who negotiated the sale). However, in other cases, compensation arrangements and the various distribution systems of insurance entities (e.g., branch, independent retailer, captive agent, wholesaler) may be complex and require careful consideration to determine which costs are deferrable.

In such cases, judgment will be required to:

- Identify whether a particular cost represents a "direct" cost of acquisition
- Identify whether a person is an "employee" for purposes of payroll-related costs
- Determine the portion of employee time that relates to successful versus unsuccessful efforts

Figure IG 3-1 illustrates the assessment process for determining which compensation costs are deferrable.

Figure IG 3-1



3.4.2.1 *Definition of an employee*

The employee compensation and fringe benefits "bucket" relates solely to *employee* compensation and payroll-related fringe benefits; compensation paid to third parties is excluded. ASC 944-30 provides no explicit definition of "employee." In certain cases (e.g., captive agent structures), the relationship between the entity and the agent is more akin to one of an employer/employee, despite the legal form of that relationship. This requires careful consideration of the facts and circumstances. For instance, if the captive agents receive health benefits from the entity, work out of the insurance entity's branch office, are under the control of the entity's managing general agents, and are exclusive to the entity, then it may be appropriate to treat these agents as employees, and, therefore, a portion of the captive agents' compensation may be deferred.

3.4.2.2 *Direct versus indirect costs*

As noted in IG 3.4, a cost must be directly related to a sale in order to be eligible for deferral. For a cost to be considered direct, it must result directly from and be essential to the contract acquisition or renewal.

Managerial compensation

Careful consideration of compensation paid to executives and managerial personnel who may only spend a portion of their time directly involved in the sales effort is necessary in order to appropriately identify the portion of such costs that may be deferred. In addition, in certain instances, a cost may be incremental (i.e., it varies based on sales volume), but it is not direct (e.g., it is paid to a supervisory regional sales manager who did not participate directly in an individual sale), and thus would not be eligible for deferral.

ASC 944-30-55-1G provides implementation considerations for managerial compensation.

> ASC 944-30-55-1G
>
> The portion of the total compensation of executive employees that relates directly to the time spent approving successful contracts may be deferred as acquisition costs. For example, the amount of compensation allocable to time spent on policies actually issued after approval by a contract approval committee is a component of acquisition costs.

In addition, certain employee managers may spend time directly approving sales, reviewing and approving specific contractual terms of customized contracts, as well as participating in and performing sales calls and other contract acquisition efforts and processes. Time spent on such detailed efforts may extend beyond traditional supervision of the sales force and may be more directly attributable to successful contract acquisition efforts, depending on the level of the employee manager's involvement in these efforts and processes.

A key part of the determination will focus on whether the employee manager's time was spent on more than supervision alone. If so, the portion of the employee manager's time and other expenses that can be directly linked to a specific successful policy issuance would be deferrable.

In contrast, an employee manager's time spent supervising, monitoring, and training employees is an indirect cost of contract acquisition that would be expensed as incurred. In general, we would not expect a significant portion of an employee manager's time to be directly attributable to contract acquisition efforts, unless there are unique facts and circumstances or specific types of complex or

customized contracts for which the manager plays a more substantial role in the actual acquisition of the policies.

When employee managers are paid a fixed compensation, such as a salary, which covers the portion of their time spent directly on contract acquisition efforts, a determination would need to be made of the amount attributable to successful versus unsuccessful contract acquisition efforts. In addition, when employee managers are paid variable compensation, such as commissions or a bonus when the sales force that they supervise achieves a certain level of sales, a determination would need to be made of the amount attributable to contract acquisition efforts.

Question IG 3-3 addresses whether a manager's incentive bonus is eligible for deferral.

Question IG 3-3

Insurance Company pays employee managers a $5,000 bonus upon the sale of the 100th policy by the respective sales force that the employee managers supervise. May Insurance Company defer this bonus as an incremental direct cost of contract acquisition?

PwC response

It depends. Despite the fact that the employee manager's compensation is based on sales volume, only the portion of compensation spent directly approving sales or participating in contract acquisition efforts would be deferrable. The portion of the bonus relating to indirect activities that they perform, such as training, supervision, and support, despite being incremental, would not be eligible for deferral.

Employee wholesalers

Fixed and variable compensation may be paid to employee wholesalers, whose job is to support the distribution of insurance products sold through third party "retailers," such as banks and insurance agencies. There are many types of wholesaler activities; some may involve more direct involvement in the sale of products than others. For example, direct activities may include working with a retailer to customize a product for a specific prospective policyholder, participating in sales meetings with a customer, providing detailed illustrations of how the product works for the broker to take back to the customer, or approving the contract sale.

Activities that would typically be indirect for which the related compensation would not be deferrable may include marketing campaigns, developing contract illustrations for future sales, training staff or brokers, developing relationships with brokers, and acquiring broker shelf space for the entity's products.

Variable compensation may be paid to the wholesalers based on the sales volume achieved in their particular geographic territory or product line. It is important to focus on the activities that the wholesaler is performing to determine what portion, if any, of any variable or fixed compensation is directly related to a sale. Only the portion of variable and fixed compensation directly related to the sales effort would be deferrable and, for fixed compensation, the successful efforts percentage would need to be applied. Allocating time spent on direct activities in wholesaler arrangements, as with manager arrangements, can be challenging; the guidance does not prescribe that a particular methodology be applied.

Example IG 3-2 illustrates three different ways in which employee wholesaler compensation may be attributed to successful efforts deferral.

EXAMPLE IG 3-2

Determination of employee wholesaler compensation costs eligible for deferral when compensation is comprised of both fixed and variable compensation

Insurance Company employs a wholesaler who receives both fixed and variable compensation to support the distribution of insurance products sold through the insurance entity's third party "retailers." The wholesaler performs a variety of activities, some of which relate directly to the sale of insurance products.

Variable compensation	$200,000
Fixed compensation	$50,000
Total compensation	$250,000

- The wholesaler spent 20% of his time directly involved in specific contract sales
- There is an 85% success rate

What amount of the wholesaler's fixed and variable compensation is eligible for deferral by Insurance Company?

Analysis

Insurance Company needs to determine the portion of wholesaler activity that is directly related to selling, underwriting, inspecting, or issuance of the product, as opposed to indirect involvement in supporting and supervising the distribution channel. Direct means essential to the successful sale, and that the wholesaler must have had an active participation in the sale, such as participating in the sales meetings or approving the contract. Supervision and support alone do not qualify as direct and, as such, the portion of compensation relating to these efforts would not qualify for deferral. A variety of methodologies may be employed in order to apportion the wholesaler compensation costs that may be deferred.

- Option A: Apply the 20% ratio representing the wholesaler time spent on direct sales activities to (1) the variable compensation and (2) the successful portion of fixed compensation. That is, deferred costs relating to incremental direct compensation would be 20% x $200,000 ($40,000), and deferred costs relating to fixed compensation would be 20% x ($50,000 x 85%) or $8,500, for total deferrable compensation costs of $48,500 relating to the employee wholesaler.

- Option B: Assume that incremental direct costs under ASC 944-30-25-1A(a) are limited to costs that are 100% direct and variable (such as commissions to direct selling agents). Therefore, in situations when the employee is performing both direct and indirect sales activities, the entire compensation, including the variable component, is allocated to the employee compensation and fringe benefits "bucket" under ASC 944-30-25-1A(b). Applying the 20% ratio representing wholesaler time spent on direct sales activities to the total compensation and then applying a

success factor would result in total deferrable compensation costs of $42,500 ($250,000 x 20% x 85%).

- Option C: Assume that variable compensation is paid for direct acquisition activities and that fixed compensation is paid for indirect activities, assuming a constant rate is earned per hour for all activities. The rate assumed for specific activities would require sufficient documentation of the rationale for that rate. Assuming a 2,000-hour work year, the rate per hour would be $250,000/2000 hours, or $125 per hour. Applying that rate to the 400 hours of direct sales activity (2000 hours x 20%) would result in $50,000 of deferrable compensation. Under this method, there is no success rate applied, because the $50,000 of deferrable compensation is assumed to be only related to the variable compensation. That is, all the direct sales activity is paid through variable compensation, and the remainder of that compensation as well as all of the fixed compensation would be attributed to non-direct activities.

We believe that any of these methods would be an acceptable interpretation for determining the wholesaler compensation costs eligible for deferral. Once a methodology is defined and implemented by an insurance entity, this methodology should be consistently applied, unless facts and circumstances unique to that insurance entity support the use of a differing methodology. In none of the alternative scenarios would the $200,000, though a form of "incremental" compensation, be deferred in its entirety because the wholesaler spent only 20% of his time directly involved in acquisition efforts.

Overriding commissions to brokers and agents

Overriding commissions, also called overwriting commissions, are payments to brokers, managing general agents, or any other agents on a particular line of insurance written by other agents within a geographical area. These amounts may be separately specified in the contractual agreements in addition to the sales commission amounts due to sales agents that are deferred as incremental direct costs.

It is important that insurance entities analyze the nature of the services being provided in exchange for the overriding commission payments. Although overriding commissions may be incremental in nature, they may not be direct. Since these amounts are separate from sales commissions, it is possible that they are payments for costs associated with training, rent, general supervision, compliance, or other administration and overhead costs, which would be indirect costs of contract acquisition that would be expensed as incurred.

Commission and bonus payments inherently include amounts to compensate agents for solicitation and other indirect costs incurred by the agent. However, if the overriding commissions are not separately distinguishable from sales commissions, or are incurred in transactions with independent third parties when there is limited access to the information about the specific nature of the activities performed for those commissions, the overriding commissions are potentially deferrable. We believe entities should defer agent or broker overriding commissions and bonuses incurred in transactions with independent third parties if they are incremental direct costs of contract acquisition, or are incurred in transactions with independent third parties when there is limited access to information about the specific nature of the activities performed for that commission.

3.4.2.3 *Successful versus unsuccessful contract efforts*

ASC 944-30-55-1E provides implementation guidance for the determination of successful-efforts.

> ASC 944-30-55-1E
>
> The successful-efforts accounting notion utilized at an entity-wide level may result in a standard costing system that does not accurately reflect the amount of costs that may be deferred and amortized under this Subtopic. Successful acquisition efforts can be determined as a percentage of each function (for example, application, underwriting, and medical and inspection) and may be based on the percentage, adjusted for idle time and time spent on activities for which the related costs cannot be deferred, of successful and unsuccessful efforts determined for each function.

Standard costing may be used to estimate the costs to be deferred when the costs of acquisition are similar among a group of contracts, whereas actual costs may need to be identified separately in other contracts. In practice, a variety of techniques are applied to determine the costs associated with the successful acquisition of new or renewal insurance contracts. In some instances, insurers may find it sufficient to estimate costs relating to successful efforts by comparing the number of policies issued to the total number of applications processed. In other situations, entities may find that it takes more time to approve a policy than to decline coverage to a potential policyholder. In the latter situation, entities may decide that time studies focusing on the amount of time and effort an employee spent approving and issuing contracts are a better determinant of costs associated with successful contracts.

Once employee efforts are assigned, the proportional effort pertaining to "successful efforts" is applied to an employee's compensation (i.e., salary and related compensation) in order to determine the portion of total employee compensation eligible for deferral under ASC 944-30-25-1A(b).

3.4.3 *Other costs directly related to the acquisition activities*

ASC 944-30-55-1A includes examples of other costs directly related to the acquisition activities.

> ASC 944-30-55-1A
>
> Examples of other costs related directly to the insurer's acquisition activities in paragraph 944-30-25-1A(b) that would not have been incurred by the insurance entity had the acquisition contract transaction(s) not occurred include all of the following:
>
> a. Reimbursement of costs for air travel, hotel accommodations, automobile mileage, and similar costs incurred by personnel relating to the specified activities
>
> b. Costs of itemized long-distance telephone calls related to contract underwriting
>
> c. Reimbursement for mileage and tolls to personnel involved in on-site reviews of individuals before the contract is executed.

Costs must be directly attributable to the insurer's acquisition of a contract to be deferrable. In addition, only the portion of such costs that ultimately resulted in a successful sale is eligible for deferral.

3.4.4 Direct-response advertising costs

ASC 720-35-05-4 defines advertising.

ASC 720-35-05-4

Advertising is the promotion of an industry, an entity, a brand, a product name, or specific products or services so as to create or stimulate a positive entity image or to create or stimulate a desire to buy the entity's products or services. Advertising generally uses a form of media—such as mail, television, radio, telephone, facsimile machine, newspaper, magazine, coupon, or billboard—to communicate with potential customers.

General advertising is not an acquisition cost. Therefore, in accordance with ASC 720-35-25-1, general purpose advertising costs should be expensed either as incurred or the first time the advertising takes place.

Certain direct-response advertising costs may be deferred provided they meet the conditions outlined in ASC 944-30-25-1AA. Direct-response advertising costs may be deferred if the primary purpose of the advertising is to elicit sales to customers that have responded specifically to the advertising and the direct-response advertising results in probable future benefits.

3.4.4.1 Primary purpose to elicit sales from direct response advertising

The first condition for deferring direct-response advertising is that the primary purpose of the advertising is to elicit sales from customers who can be shown to have responded specifically to the advertising. To meet this condition, the sale must be the direct result of the advertising (i.e., no other significant efforts are needed to elicit the sale). Insurance entities should consider whether the advertising campaign merely solicits potential policyholder interest or inquiry, with additional sales, underwriting, and other policy issuance efforts to be completed after the potential policyholder has initially responded to the advertising. If this is the case, the advertising campaign would not represent direct-response advertising eligible for deferral.

A significant lapse of time between the advertising activity and the ultimate sale in an environment of broad general advertising may disqualify the sale as being deemed a direct result of the advertising. Sales prices for the specific product are also necessary in the advertising to demonstrate no substantial effort is needed in addition to the solicitation.

In order to conclude that the advertising elicited the sale, ASC 944-30-25-1D requires that the insurance entity maintain documentation of responses that identify the name of the customer and the specific advertising that elicited the sale. Examples of such documentation are included in ASC 944-30-25-1D.

Excerpt from ASC 944-30-25-1D

Examples of such documentation include the following:

a. Files indicating the customer names and the related direct-response advertisement

b. A coded order form, coupon, or response card, included with an advertisement, indicating the customer name

c. A log of customers who have made phone calls to a number appearing in an advertisement, linking those calls to the advertisement.

3.4.4.2 *Probable future benefits of direct-response advertising*

The second condition for deferring direct-response advertising costs is that such advertising will result in probable future benefits. The "probable future benefits" of direct-response advertising activities are defined in ASC 944-30-25-1F.

ASC 944-30-25-1F

The probable future benefits of direct-response advertising activities are probable future revenues arising from that advertising in excess of future costs to be incurred in realizing those revenues.

ASC 944-30-25-1P provides that the revenues utilized in determining probable future revenues are limited to primary revenues, which are revenue from sales to customers receiving and responding to the direct-response advertising. Such revenues should exclude those generated from other acquisition efforts. Probable revenues for insurance entities may include renewal premiums or fees expected to be earned over several future accounting periods. Such revenues must be able to be reliably predicted and are substantially the result of the direct-response advertising being assessed (i.e., it does not result from later significant additional direct-response advertising).

Deferral requires persuasive evidence that demonstrates that future benefits from the current advertising campaign will be similar to the results of past direct-response advertising activities that produced future benefits in accordance with ASC 944-30-25-1G. Such evidence should include verifiable historical results from past direct-response campaigns. Attributes to consider in determining whether the results will be similar to past campaigns include the nature of the current campaign vis-a-vis prior campaigns in areas such as the: (a) demographics of the targeted audience, (b) method of advertising, (c) similarities of the products offered, and (d) economic condition of the targeted audience and the marketplace in general. For example, results of a previous campaign targeted only to high-income zip codes would not represent acceptable historical evidence for a future broad-based campaign. Similarly, results of a prior campaign for automobile insurance products in New Jersey would not necessarily be considered predictive of a future campaign for automobile insurance products in Wisconsin because of different traffic levels and demographics.

The criteria for assessing probable future benefits are stringent. As such, it is unlikely that deferral would be acceptable for a recently formed entity or line of business because, in part, asset recognition assumes that the specific entity's prior operating statistics demonstrate future benefits. ASC 944-30-25-1H indicates that industry statistics are not considered objective evidence that the direct-response advertising will result in future benefits in the absence of a reporting entity's operating history. The operating history for other products or services may only be used if it can be demonstrated to have a high degree of correlation to the product or service being evaluated.

3.4.4.3 *Direct-response advertising – basis of measurement*

Unlike the requirement in ASC 944-30-25-1A for deferrable acquisition costs to be related directly to the successful acquisition of insurance contracts, the entire cost of a qualifying advertising campaign can be deferred into direct-response advertising costs in accordance with ASC 944-30-25-1J. The direct-response advertising campaign is undertaken with the expectation that not all targets will enter an insurance contract but that the benefits created by the customers who do will justify the total advertising spend. As such, the cost of the qualifying advertising campaign for all prospective customers, not only the cost related to the portion of the potential customers that are expected to respond to the advertising, are deferred.

Since deferred advertising costs are subsequently accounted for as DAC for classification and amortization purposes, the deferred advertising costs are amortized over the initial contract period.

3.4.4.4 *Distinguishing direct-response advertising and sales efforts*

Question IG 3-4 addresses the accounting for call center costs.

Question IG 3-4

Some insurance entities may have sales call centers in which employees contact or receive phone calls from prospective and existing policyholders in an effort to acquire or renew insurance policies.

Are costs of call centers considered part of an insurance entity's direct-response advertising costs or other contract acquisition costs?

PwC response

Although the entity may be able to determine which of the placed calls result in new or renewed insurance contracts and these may result in future benefits, we believe that generally these efforts should be considered employee sales costs rather than direct-response advertising. Therefore, generally, the entity should analyze the compensation and other costs incurred for the sales call centers to determine their eligibility under the deferral requirements in ASC 944-30-25-1A.

Some insurance entities may also choose to have call centers receive responses to direct-response advertising. Whether these costs are deferrable depends on the relationship between the advertising campaign and the efforts and activities conducted by the entity's call center. If the entity's call center receives phone calls in response to specific qualified direct-response advertising, the entity's call center costs associated with administering the campaign may be considered a direct response advertising cost.

3.4.5 *DAC application examples of compensation arrangements*

Example IG 3-3, Example IG 3-4, and Example IG 3-5 provide interpretive guidance on the determination of the portion of employee compensation that may be deferred when compensation costs are comprised of fixed salaries, variable commission, payroll-related fringe benefits, or a combination thereof.

EXAMPLE IG 3-3

Determination of employee compensation costs eligible for deferral when total compensation is fixed salaries

Insurance Company pays employee sales agents a $100,000 fixed salary. Insurance Company has performed various analyses, including time studies, and determined the following information with regard to three employee agents:

	Time attributed to successful contract acquisition efforts	Fixed salary
Agent 1	55%	$100,000
Agent 2	85%	$100,000
Agent 3	75%	$100,000

The time attributable to successful contract acquisition efforts excludes time spent on activities unrelated to the acquisition of insurance policies and idle time. The employee agents receive no other payroll fringe benefits. What amount is deferrable for each agent?

Analysis

Insurance Company should first identify any incremental direct costs of contract acquisition. Employee sales agent compensation is a direct acquisition cost. However, the $100,000 fixed salary is not an incremental contract acquisition cost because Insurance Company will pay this amount regardless of whether any insurance policies are issued.

Next, Insurance Company should determine the portion of each agent's total compensation and fringe benefits (excluding any compensation that is deferred as incremental direct costs of contract acquisition, which in this example is none) directly related to time spent selling insurance contracts. This is accomplished by applying each agent's percentage of time attributable to successful efforts to each agent's eligible fixed compensation.

This analysis is illustrated as follows:

	Agent 1	Agent 2	Agent 3
Fixed salary	$100,000	$100,000	$100,000
Time attributed to successful efforts	55%	85%	75%
Compensation cost attributable to successful efforts (deferrable)	$55,000	$85,000	$75,000

EXAMPLE IG 3-4

Determination of employee compensation costs eligible for deferral when compensation is comprised of fixed salaries and variable commission

Insurance Company pays its employee sales agents the greater of a $100,000 fixed salary or a variable commission, defined as 25% of annual premiums for insurance policies sold. Insurance Company has performed various analyses, including time studies, and determined the following information with regard to three of its employee agents:

	Time attributed to successful contract acquisition efforts	Fixed salary	Variable commission amount
Agent 1	55%	$100,000	$80,000
Agent 2	85%	$100,000	$150,000
Agent 3	75%	$100,000	$120,000

The time attributable to successful contract acquisition efforts excludes time spent on activities unrelated to the acquisition of insurance policies and idle time. The employee agents receive no other payroll fringe benefits. What amount is deferrable for each agent?

Analysis

Insurance Company should first identify the incremental direct costs of contract acquisition. Employee sales agent compensation, including fixed salary and variable commission amounts, is a direct acquisition cost. However, the $100,000 fixed salary is not an incremental contract acquisition cost because Insurance Company will pay this amount regardless of whether any insurance policies are issued. In contrast, the commission amounts paid above the $100,000 fixed salary are incremental, because Insurance Company would not have incurred costs over $100,000 if the employee agents had not successfully acquired the contracts over the specified sales threshold. Since the variable commission amounts in excess of the fixed salary are incremental direct costs, these may be deferred.

Next, Insurance Company should determine the portion of the employee agents' total compensation and fringe benefits (excluding any compensation that is deferred as incremental direct costs of contract acquisition) directly related to time spent selling insurance contracts. This is accomplished by applying each employee agent's percentage of time attributable to successful efforts to each agent's eligible compensation. This amount (i.e., fixed compensation) does not include any of the incremental direct costs attributable to the variable commission amounts that may be deferred.

This analysis is illustrated as follows:

	Agent 1	Agent 2	Agent 3
Fixed salary (1)	$100,000	$100,000	$100,000
Time attributed to successful efforts	55%	85%	75%
Fixed compensation cost attributable to successful efforts (2)	$55,000	$85,000	$75,000
Variable commission (25% of premiums)	$80,000	$150,000	$120,000
Incremental direct compensation - amount of variable commission in excess of fixed salary (3)	N/A	$50,000	$20,000
Deferrable compensation costs [(2)+(3)]	$55,000	$135,000	$95,000

Accordingly, for agent 2, Insurance Company would record total employee compensation expenses of $15,000 (total compensation of $150,000 less $135,000 deferred costs) in its income statement and $135,000 of DAC on the balance sheet. In subsequent reporting periods, this asset would be amortized to income as an acquisition cost expense.

EXAMPLE IG 3-5

Determination of employee compensation costs eligible for deferral when compensation is comprised of variable commission and fringe benefits

Insurance Company pays an employee sales agent a variable sales-based commission of $80,000, as well as $20,000 of other payroll-related fringe benefits for medical and dental insurance and 401(k) plan contributions. The entity has determined that the sales force, of which this agent is a member, is successful 90% of the time it spends directly acquiring new or renewal policies. What portion of the total cost incurred by Insurance Company related to this agent's compensation is eligible for deferral under the guidance in ASC 944-30?

Analysis

Insurance Company should first identify the incremental direct costs of contract acquisition. The terms of the sales-based commission arrangement require Insurance Company to compensate the agent for each contract acquired on a contract-by-contract basis. In other words, the agent is only compensated for acquired contracts. As such, the entire variable sales-based commission of $80,000 is an incremental direct cost of contract acquisition and may be deferred because Insurance Company would not have incurred the $80,000 sales-based commission if the entity had not successfully acquired the contracts to earn this amount.

Next, Insurance Company should determine the portion of the agent's total compensation (excluding any compensation that is deferred as incremental direct costs of contract acquisition) and payroll-related fringe benefits directly related to time spent selling insurance contracts that have actually been

acquired. In this fact pattern, the payroll-related fringe benefits that should be deferred by Insurance Company are $18,000 ($20,000 * 90%), representing the successful efforts portion of these costs. This amount does not include any of the incremental direct costs attributable to the sales-based commission amount, which was determined to be deferrable in its entirety. Therefore, $98,000 of this agent's total compensation and payroll-related fringe benefits of $100,000 is eligible for deferral under ASC 944-30.

3.4.6 *DAC – initial recognition and measurement*

Incurred acquisition costs that meet the criteria for deferral in ASC 944-30-25-1A through ASC 944-30-25-1AA are deferred and amortized into acquisition expenses in future periods. As required by ASC 944-30-30-2, acquisition costs, including future contract renewal costs, should not be deferred or amortized before the incurrence of those costs.

3.4.7 *Non-deferrable acquisition costs*

In accordance with ASC 944-720-25-2, acquisition costs of new and renewal business that are not deferred because they do not meet the criteria for deferral in ASC 944-30-25-1A through ASC 944-30-25-1AA and certain indirect costs are required to be charged to expense as incurred. Additionally, certain costs are required to be charged to expense as incurred, such as those relating to investments, general administration, policy maintenance costs, product development, market research, and general overhead, in accordance with ASC 944-40-30-15.

ASC 944-30-55-1F describes other types of acquisition costs that would fail to meet any of the categories of deferrable costs.

ASC 944-30-55-1F

All other contract acquisition-related costs, including costs related to activities performed by the insurer for soliciting potential customers (except direct-response advertising capitalized in accordance with paragraph 944-30-25-1AA), market research, training, and administration, should be charged to expense as incurred. Employees' compensation and fringe benefits related to those activities, unsuccessful contract acquisition efforts, and idle time should be charged to expense as incurred. Administrative costs, rent, depreciation, and all other occupancy and equipment costs are considered indirect costs and should be charged to expense as incurred.

Unsuccessful contract acquisition efforts are related to the non-incremental time and other costs incurred that do not result in the issuance of policies. For example, although time and travel costs may be incurred in selling insurance policies, the insurer will not issue a policy to every individual or group solicited. The costs associated with these unsuccessful solicitations are not deferrable.

Idle time represents the time employees are not actively involved in performing underwriting, issuing and processing, performing medical and other inspections, and selling insurance contracts. Idle time can be caused by many factors, including lack of work, training, delays in workflow, and equipment failure. Idle time can be measured through the establishment of standard costs, time studies, ratios of productive and nonproductive time, and other methods.

Pursuant to ASC 944-30-55-1B, costs for software dedicated to contract acquisition, including the associated amortization expenses, are not eligible for deferral as DAC, since these costs would have been incurred regardless of whether or not the insurance policy is issued. The guidance in ASC 985, *Software,* should be considered in determining the accounting treatment for software costs.

3.4.7.1 *Non-deferrable costs for certain long-duration contracts*

For long-duration contracts and, in practice, investment contracts, acquisition costs, such as commissions and premium taxes that vary in a constant relationship to premiums or insurance in force, are recurring in nature, or tend to be incurred in a level amount from period to period, may not be deferred in accordance with ASC 944-30-25-4. Instead, these costs should be considered maintenance or other period costs and should be charged to expense in the period incurred.

Additionally, trail commissions that are calculated as a percent of account balance are typically not deferrable. However, for premium-based commissions on universal life insurance products that have flexible premiums, we believe that even constant percentage of premium commissions may be deferrable because the premium payments are not level and recurring; they are at the discretion of the policyholder.

3.4.7.2 *Non-deferrable costs – exclusivity arrangements*

An insurance entity may enter into a relationship with a retailer, or other party, in which the insurance entity pays an upfront amount in exchange for exclusive rights to the retailer's customers and distribution channels to sell the insurance entity's products (e.g., warranty contracts). At the time the agreement is signed with the retailer, there are no contracts that have been entered into with the retailer's customers. Under ASC 944-30, an insurance entity may only defer acquisition costs relating to the successful acquisition of new or renewal insurance contracts. As these payments are made in connection with entering into an exclusive relationship with the retailer, before the insurance entity has entered into any insurance contracts with customers, and are not refundable based on the volume of any insurance contracts subsequently negotiated, the payment does not meet the definition of a deferrable insurance acquisition cost. However, in certain instances, if specified criteria are met, it may be appropriate to conclude that the payment for the exclusivity arrangement represents an identifiable intangible asset accounted for under ASC 350-30. In other fact patterns—for example, if the upfront payment is conditional upon future sales—it may represent a prepaid commission.

3.5 Subsequent accounting for deferred acquisition costs

The subsequent accounting for deferred acquisition costs (DAC), including the basis or method of DAC amortization, the amortization period, and recoverability assessment, is dependent on whether the contract is classified as short-duration, long-duration, or an investment contract. ASU 2018-12 does not change the subsequent accounting for DAC for short-duration contracts.

3.5.1 *Short-duration contracts – subsequent accounting for DAC*

Deferred acquisition costs (DAC) for short-duration contracts are required to be charged to expense in proportion to premium revenue recognized in accordance with ASC 944-30-35-1A. In practice, an insurer may accomplish this by calculating a ratio and applying this ratio to unearned premiums. This ratio, sometimes referred to as the "equity in unearned premiums" ratio, is computed as DAC divided by written premiums. ASC 944-30-35-2 indicates that if short-duration contract acquisition costs are

determined based on a percentage relationship of costs incurred to premiums from contracts issued or renewed for a specified period, the percentage relationship and the period used, once determined, are required to be applied to applicable unearned premiums throughout the period of the contracts. Example IG 3-6 illustrates how this guidance could be applied in practice.

EXAMPLE IG 3-6

Amortization of short-duration DAC

On December 31, 20X1, Insurance Company has an unearned premium balance of $300 and DAC balance of $45 for a group of contracts (Grouping A). Insurance Company determines that qualifying acquisitions costs for deferral are 15% of written premium on January 1, 20X2 consistent with the previous period for Grouping A. On January 1, 20X2, new contracts are issued in Grouping A for a written premium of $1,000.

At the end of the first quarter, Grouping A has an unearned premium balance of $900.

How would Insurance Company derive the amount of ending DAC and related amortization for the first quarter for contract Grouping A?

Analysis

Insurance Company would calculate the ending DAC balance by multiply the period-end unearned premiums balance of $900 by 15%, which is the percentage relationship of costs incurred to premiums for contracts issued or renewed for this grouping of contracts (resulting in DAC at period end of $135).

To compute the amortization of deferred acquisitions costs to be recognized in current period earnings, Insurance Company would calculate the change in DAC. Acquisition costs deferred in the period were $150 (written premium of $1,000 X 15%). Therefore, the current period expense is $60 ($45 beginning balance, plus $150 new DAC, less the ending balance of $135).

In accordance with ASC 944-30-35-63, unamortized DAC for short-duration contracts are subject to premium deficiency testing in accordance with the provisions of ASC 944-60. See IG 7.2 for guidance on premium deficiency testing.

3.5.2 Long-duration contracts – subsequent accounting of DAC

The DAC amortization model for all insurance contracts classified as long duration is the same and impacts the following types of contracts, as noted in ASC 944-20-05-14 and further discussed in IG 2:

- Traditional fixed and variable annuity and life insurance contracts
- Universal life-type contracts
- Nontraditional fixed and variable annuity and life insurance contracts
- Participating life insurance contracts
- Group participating pension contracts

DAC is amortized on a straight-line basis over the expected term of the related contracts. No interest accrues on unamortized DAC. This is consistent with other industries' amortization methods for deferred costs that are not measured using present value techniques. The principle is that deferred costs represent historical rather than future cash flows and therefore are not monetary items.

DAC is not subject to impairment testing. DAC is viewed similar to debt issuance costs, which are amortized over the debt term as part of the cost of funding and are not subject to impairment testing. Therefore, for traditional long-duration insurance contracts and limited-payment contracts, DAC balances are excluded from the net premium ratio. The premium deficiency test for other long-duration insurance contracts will also exclude the DAC balance. There is no separate DAC recoverability test for any type of investment contract.

There is no concept of "shadow DAC" adjustments recorded in AOCI as the amortization method is not impacted by realized gains and losses.

3.5.2.1 Long-duration contacts – method of DAC amortization

DAC is amortized to expense on a straight-line basis, either at the individual or grouped contract level over the expected term of the related contracts in accordance with ASC 944-30-35-3A. Contracts may be grouped as long as the amortization approximates straight-line amortization at an individual contract level. Contracts should be grouped consistent with the grouping used to estimate the liability for future policy benefits (or other related balances) for the corresponding contracts. The amortization method should be applied consistently over the expected term of the related contracts. If contracts within a group are different sizes, they may need to be weighted to achieve the straight-line pattern.

Question IG 3-5 addresses the DAC amortization on a group basis.

Question IG 3-5

How should an insurance entity evaluate if the grouped contract method "approximates" amortization at an individual contract level?

PwC response

The group level amortization method needs to create a "straight-line pattern" to meet the objective of amortizing the DAC over the expected life of the group. The amortization method needs to reflect (1) DAC as derecognized when a policy is no longer in force and (2) that contracts within a group may be of different sizes (e.g., face value or notional). The assumptions used in the amortization method need to be updated when the expected life of the group changes. An insurance entity is not required to demonstrate that the dollar amount of group basis amortization would be the same as on an individual contract basis. In fact, the amortization amount between the two bases is expected to be different when actual experience differs from expectations. This interpretation is consistent with the views expressed by the FASB staff on their November 2018 webcast, IN FOCUS: FASB Accounting Standards Update on Insurance.

The new guidance does not require a specific method to achieve the approximate straight-line amortization of grouped contracts. For example, while insurance in force may be an appropriate basis to weight contracts within a group for certain types of business (such as whole life and renewable term insurance), a different basis may be needed for other types of coverage, such as long-term care or

when multiple in-force amounts are involved (such as additional accidental death benefits). However, under ASC 944-30-35-3A, amortization amounts are not permitted to be a function of revenue or profit emergence. The amortization method is required to be applied consistently over the expected term of the related contracts. All assumptions (e.g., terminations) should be consistent with those used to determine the liability for future policy benefits or related balances for the associated contracts.

Question IG 3-6 addresses if grouping is an entity-wide decision.

Question IG 3-6

Does grouping of policies versus individual policies (i.e., seriatim) for DAC amortization purposes need to be an entity-wide decision or can it vary by product or other level of grouping?

PwC response

The guidance requires that the amortization be charged to expense on a constant level basis (either grouped or individual) over the expected term. Grouping is allowed as long as it approximates straight-line amortization. ASC 944-30-35-3A notes that the method should be applied consistently over the term of the contracts. Therefore, the method should not be switched from seriatim to grouping (or vice versa) over the term of those contracts.

Question IG 3-7 addresses the DAC amortization on a group basis.

Question IG 3-7

What basis may be used to weight a group of universal life insurance policies when determining DAC amortization?

PwC response

DAC should be amortized on a straight-line basis (considering expected terminations). Therefore, any method that achieves that pattern would be acceptable. Net amount at risk, which would typically decrease over the life of a universal life product, and account balances that change with interest crediting and fees over the life of a contract would not be appropriate bases for weighting. Using premium deposits as a base may result in an acceptable approximation of the straight-line requirement.

ASC 944-30-35-3B requires that unamortized DAC be reduced for actual experience in excess of expected experience. As a result, contract terminations (e.g., due to lapse or death) would result in a write off of the DAC associated with the terminated contracts, causing an additional charge to income if terminations are more than what was assumed. Changes in future assumptions (e.g., about the expected duration of contracts or amount of coverage expected to be in force) are applied by adjusting the amortization rate prospectively rather than through a retrospective catch up adjustment.

Question IG 3-8 addresses updating the DAC amortization assumptions.

Question IG 3-8

Can an insurance entity update its DAC amortization for actual insurance in force changes in an interim period when such changes were not updated for the calculation of the liability for future policy benefits (i.e., updating the net premium ratio for the associated cohort)?

PwC response

Yes. DAC must be amortized using assumptions that are consistent with the related liability for future policy benefits. ASC 944-40-35-6 requires that the liability for future policy benefits be updated for actual experience at least on an annual basis and more frequently if cash flow assumptions are being updated. Cash flow assumptions need only be updated in interim reporting periods if evidence suggests that the assumptions should be revised. If an entity has determined that the actual experience incurred in the period was not significant enough to warrant an update to the net premium ratio, reflecting the actual insurance in force for the period within the DAC would not alter the decision that no update to the liability for future policy benefits was needed. If the entity chooses to update insurance in force for the insignificant change for DAC, it would not violate the principle that the assumptions be consistent between the two measurements as the differences in assumptions are insignificant.

DAC is amortized to expense on a straight-line basis, either at the individual or grouped contract level over the expected term of the related contracts. The expected term of the contract considers the entire accounting term of the contract in which there are contractual cash flows, including the period over which claims are expected to be paid. For example, this would include the claims settlement period for contracts such as long-term care or disability. Prior to ASU 2018-12 adoption, DAC is amortized in proportion to premium revenue recognized for traditional long-duration contracts such as these.

When determining the expected term of the accounting contracts for amortization of DAC relating to deferred annuity contracts, the payout phase should not be combined with the accumulation phase in accordance with ASC 944-30-35-3 because the payout phase is required to be accounted for as a separate contract if and when annuitization is elected. Therefore, only the expected term of the accumulation phase is considered for DAC amortization.

For immediate annuities, any DAC generated on the immediate annuity sale is amortized over the period in which annuity payments are expected to be made on a straight-line basis. Prior to ASU 2018-12, DAC related to immediate annuities is amortized in proportion to premium revenue recognized.

Question IG 3-9 addresses the DAC amortization contract period.

Question IG 3-9

For a contract with a GMWB feature, is the "expected term of the related contract(s)" noted in ASC 944-30-35-3A the term of the accounting contract or the legal contract?

PwC response

The "expected term of the related contract(s)" is referring to the accounting contract term. The guidance on liability valuation (ASC 944-40-35-8B) provides that upon extinguishment of the account balance (i.e., when the account balance goes to zero) for a GMWB feature, the related contract has

ended for accounting purposes, even if the legal contract survives. That date marks the end of one accounting contract (the deferred annuity contract with an MRB recorded at fair value) and the beginning of a new contract (the payout annuity). The payout phase is viewed as a separate contract and is not combined with the accumulation phase, as noted in ASC 944-30-35-3. Therefore, the DAC should be amortized over the accounting contract term with no unamortized DAC remaining for policies in the payout annuity accounting contract.

Example 2 in ASC 944-30-55-7 illustrates the amortization method for a group of 5-year term products with $80 of DAC when there are no expected terminations. Straight-line amortization results in $16 of DAC being amortized in each of the 5 years. In Example IG 3-7, we have modified the ASC 944-30-55-7 example to assume a declining persistency rate. When terminations are expected, amortizing on a straight-line basis over the expected life of the group yields a declining amortization pattern as policies lapse, as illustrated in Example IG 3-7.

EXAMPLE IG 3-7

DAC amortization with a declining persistency rate

Insurance Company insures a group of long-duration guaranteed-renewable 5-year term life insurance products that are grouped and amortized in proportion to the amount of insurance in force with a declining persistency rate. The persistency rate assumption is expected to be 90% at 12/31/20X1, 80% at 12/31/20X2, 70% at 12/31/20X3, 60% at 12/31/20X4, and 0% at 12/31/20X5. In 20X1, $80 of acquisition costs were deferred. This example assumes all lapses and deaths occur on the last day of the year.

For simplicity, it is assumed that the insurance entity has no interim reporting and issues only annual financial statements. If the entity instead issued quarterly financial statements, the beginning of the period would be the beginning of the current quarter for purposes of both the interim and annual financial statements.

How should Insurance Company calculate annual DAC amortization?

Analysis

Insurance Company should calculate annual amortization expense as follows. The adjusted face amounts at 12/31 of each year end are also the amounts at 1/1 of each succeeding year.

Year	Adjusted face amount (D)	Annual amortization (D)*(C)	DAC balance
1/1/20X1	$1,000	$0	$80
12/31/20X1	900	20	60
12/31/20X2	800	18	42
12/31/20X3	700	16	26

12/31/20X4	600	14	12
12/31/20X5	0	12	0
Total units	4,000* (A)		
DAC	$80 (B)		

Amortization rate (B/A) = 2% (C)

*4,000 represents the total beginning of 20X1 units (1,000) plus the ending units for years 20X1 through 20x5 (i.e., 1,000 + 900 + 800 + 700 + 600 + 0)

Example IG 3-8 demonstrates an acceptable method of recording the change in current period persistency and the impact on DAC expense.

EXAMPLE IG 3-8

Impact of a change in current period persistency and expected future persistency on DAC expense

Insurance Company insures a group of long-duration guaranteed-renewable 5-year term life insurance products that are grouped and amortized in proportion to the amount of insurance in force with a declining persistency rate. At inception of the block of contracts, the persistency rate assumption is expected to be 90% at 12/31/20X1, 80% at 12/31/20X2, 70% at 12/31/20X3, 60% at 12/31/20X4, and 0% at 12/31/20X5. In 20X1, $80 of acquisition costs were deferred. However, actual terminations are in excess of those expected (60% of policies remain at the end of year 20X2 rather than expected persistency of 80%) and future expected persistency assumptions are revised for years 20X3 to 20X5 as shown below. Deaths and lapses are assumed to occur on the last day of the year.

For simplicity, it is assumed that the insurance entity has no interim reporting and issues only annual financial statements. If the entity instead issued quarterly financial statements, the beginning of the period would be the beginning of the current quarter for purposes of both the interim and annual financial statements.

How should Insurance Company calculate the impact on DAC expense of the actual experience in Year 2 and of future changes to persistency assumptions in Years 3-5?

Analysis

One approach that Insurance Company may adopt to calculate the impact on DAC of the actual experience different than expected and the annual amortization expense, consistent with the

methodology used in Example 2 in ASC 944-30-55-7B, is as follows. The adjusted face amounts at 12/31 of each year end are also the amounts at 1/1 of each succeeding year.

Year	Adjusted face amount (D)	Annual amortization (D)*(C)	DAC balance
1/1/20X1	$1,000	$0	$80
12/31/20X1	900	20	60
12/31/20X2 expected	800	18	42
12/31/20X2 actual	600		
Experience adjustment *($42 X (800-600)/800)		10.5*	31.5
12/31/20X3	500	12.6	18.9
12/31/20X4	400	10.5	8.4
12/31/20X5	0	8.4	0
Total beginning and ending units in remaining years 20X3- 20X5	1,500** (A)		
Remaining DAC 1/1/20X3	31.5 (B)		
20X3 Revised amortization rate (B/A) = 2.1% (C)			

**1,500 represents the total beginning of 20X3 units (600) plus the revised ending units for the remaining years 20X3 through 20x5 (i.e., 600 + 500 + 400 + 0).

Due to actual terminations in excess of those expected, an experience adjustment of $10.5 is recorded in addition to the annual amortization of $18. As illustrated, the amortization pattern is revised on a prospective basis beginning in year 20X3. This approach is consistent with the FASB illustration in Example 2 in ASC 944-30-55-7, which determines the current period amortization based on the beginning of the period estimates of persistency.

Other approaches may also be acceptable as long as they meet the FASB principle to approximate a seriatim straight-line basis, cannot have unamortized DAC remaining for policies that have terminated, and cannot recapture previously amortized DAC. For example, if an entity revises its estimates of persistency during the period, it may decide to calculate the current period's amortization expense based on observed persistency in the current period reflecting the revised actual persistency in its current period amortization rate, as illustrated in Example IG 3-9.

Example IG 3-9 discusses an alternative acceptable method of recording the change in current period persistency and the impact on DAC expense.

EXAMPLE IG 3-9

Impact of a change in current period persistency and expected future persistency on DAC expense - Alternative acceptable method

Insurance Company insures a group of long-duration guaranteed-renewable 5-year term life insurance products that are grouped and amortized in proportion to the amount of insurance in force with a declining persistency rate. At inception of the block of contracts, the persistency rate assumption is expected to be 90% at 12/31/20X1, 80% at 12/31/20X2, 70% at 12/31/20X3, 60% at 12/31/20X4, and 0% at 12/31/20X5. In 20X1, $80 of acquisition costs were deferred. However, actual terminations are in excess of those expected (60% of policies remain at the end of year 20X2 rather than expected persistency of 80%) and future expected persistency assumptions are revised for years 20X3 to 20X5 as shown below. Deaths and lapses are assumed to occur on the last day of the year.

Rather than follow the method illustrated in Example IG 3-8, Insurance Company may calculate the year 2 amortization expense based on observed persistency in the current period as follows. The adjusted face amounts at 12/31 of each year end are also the amounts at 1/1 of each succeeding year.

For simplicity, it is assumed that the insurance entity has no interim reporting and issues only annual financial statements. If the entity instead issued quarterly financial statements, the beginning of the period would be the beginning of the current quarter for purposes of both the interim and annual financial statements.

Year	Adjusted face amount (D)	Annual amortization (D)*(C)	DAC balance
1/1/20X1	$1,000	$0	$80
12/31/20X1	900	20	60
12/31/20X2 expected	800		
12/31/20X2 actual	600	22.5	37.5
12/31/20X3	500	15	22.5
12/31/20X4	400	12.5	10

12/31/20X5		0	10	0
Total beginning and ending units in remaining years 20X2-20X5	2,400* (A)			
Remaining DAC 1/1/20X2	60 (B)			

20X2 Revised amortization rate (B/A) = 2.5% (C)

*2,400 represents the total beginning of 20X2 units (900) plus the revised ending units for the remaining years 20X2 through 20X5 (i.e., 900 + 600 + 500 + 400 + 0).

This alternative approach determines the current period amortization based on the end of the period estimates of persistency. That is, unlike the approach shown in IG 3-8, under the alternative approach the units in the denominator of the allocation formula have been adjusted to reflect known changes in persistency during the current year (from 800 to 600) as well as the decreased persistency expected for future periods (from 700 and 600 down to 500 and 400). As such, no separate experience adjustment is recorded as the amortization pattern is revised on a prospective basis at the beginning of the period based on the period's actual experience. Under this approach, Insurance Company would utilize known information and current best estimates at the end of the period for purposes of calculating the current period DAC amortization.

The current period amortization rate would take into account all adjustments for changes in actual and expected persistency including (1) experience variances (i.e., the difference between expected and actual terminations) on current period amortization, (2) the resulting impact on future in force (i.e., the impact of what happened in the current period on remaining periods), and (3) the impact of any future persistency assumption change (i.e., the update of future projections).

Question IG 3-10 discusses whether the estimate of persistency should be the same for all products.

Question IG 3-10

May an entity determine the current period DAC amortization based on the beginning of the period estimate of persistency for some products, but use an end of the period estimate of persistency for other products?

PwC response

Example 2 in ASC 944-30-55-7 illustrates an approach that determines the current period DAC amortization based on the beginning of the period estimates of persistency. However as noted in Example IG 3-9, there is an alternative acceptable approach to calculate DAC amortization in the current period taking into account the actual persistency observed in the current period. The selection of a beginning of the period or end of the period approach is an accounting policy choice that should be applied on a consistent basis to similar transactions. Amortization including or excluding actual

persistency in the period is an allocation methodology that would typically be unaffected by different product provisions, and therefore, we expect an entity to have a consistent policy for all its long-duration products that are subject to the DAC guidance.

3.5.3 *Investment contracts – subsequent accounting for DAC*

ASU 2018-12 simplified the DAC amortization model for certain investment contracts. See IG 2.5.1 for guidance on the classification of investment contracts. Investment contracts that have significant surrender charges or that yield significant revenues from sources other than the investment of contract holders' funds will follow the new DAC amortization guidance in ASC 944-30-35-3 through ASC 944-30-35-3C (discussed in IG 3.5.2.1). However, the new guidance does not apply to certain other investment contracts accounted for as interest bearing or other financial instruments, as noted in ASC 944-825-25.

The assessment of the significance of the surrender charges and/or other sources of revenue other than the investment of contract holders' funds is a matter of judgment. If the surrender charges are similar in effect to banks' and other financial institutions' "early withdrawal penalties" for certificate of deposits (CDs) or other time deposits, the charges should be accounted for in a manner similar to banks' accounting for early withdrawal penalties. However, if the surrender charges have a greater effect than early withdrawal penalties on the revenue anticipated to recover acquisition costs, they are more similar to surrender charges on universal life-type insurance contracts than to banks' early withdrawal penalties. Different types of investment contracts issued by one company may fall into either category. Consideration should be given to the period during which the charges may be imposed; early withdrawal penalties normally apply to the entire life of a CD, while insurance contract surrender charges normally phase-out over a stated time period. Consideration should also be given to the economic effects of the surrender charge.

3.5.3.1 *Other investment contacts – method of DAC amortization*

Other investment contracts that (1) do not include significant surrender charges and (2) the investment of contract holders' funds are the only significance source of revenue, are accounted for interest bearing or other financial instruments. Accordingly, as required by ASC 944-30-35-20, deferred acquisition costs for these other investment contracts should be amortized using the interest method under ASC 310-20 (effective yield method). The incidence of surrenders can be anticipated for purposes of determining the amortization period if the surrenders are probable and can be reasonably estimated and the rate of amortization is adjusted for changes in the incidence of surrenders consistent with the handling of principal prepayments under ASC 310-20. The objective of the interest method is to arrive at periodic interest income, net of fees and costs, that reflects a constant effective yield on the net policy liabilities.

3.6 Sales inducements

Sales inducements are benefits provided to policyholders that are in excess of current market conditions or other similar contracts. The three main types of sales inducements are immediate bonuses, persistency bonuses, and enhanced crediting-rate bonuses. Immediate bonuses, sometimes referred to as day 1 bonuses, are additional amounts credited to policyholders' account balances upon signing the contract. A persistency bonus is an additional amount credited to a policyholder's account balance at the end of a specified period if the contract remains in force at that date. An enhanced

crediting-rate bonus is a higher crediting rate for a specified period in relation to other similar contracts.

The sales inducement benefits that meet specified criteria are deferred as assets rather than being immediately expensed. The guidance in ASC 944-30-25-6 and ASC 944-30-25-7 specifies the criteria to be met for a sales inducement to be deferred:

ASC 944-30-25-6

Paragraph 944-30-25-7 addresses sales inducements that may be deferrable if the insurance entity can demonstrate that the sales inducement amounts have both of the following characteristics:

a. The amounts are incremental to amounts the entity credits on similar contracts without sales inducements.

b. The amounts are higher than the contract's expected ongoing crediting rates for periods after the inducement, as applicable; that is, the crediting rate excluding the inducement should be consistent with assumptions used in contract illustrations and interest-crediting strategies.

Due to the nature of day-one bonuses and persistency bonuses, the criteria in items (a) and (b) generally are met for such sales inducements.

ASC 944-30-25-7

Amounts specified in the preceding paragraph shall be deferred and amortized using the same methodology and assumptions used to amortize capitalized acquisition costs if the sales inducements have both of the following characteristics:

a. The sales inducements are recognized as part of the liability under paragraph 944-40-25-12.

b. The sales inducements are explicitly identified in the contract at inception.

The assessment of "similar" contracts is limited to contracts issued in the same interest-crediting period that provide interest rate crediting for the same period and contain other comparable contract features. Comparable contract features may include the type of contract (e.g., single premium deferred annuity, flexible premium deferred annuity, variable annuity, universal life, variable universal life), annuity guarantee rates, and the existence of similar types of charges (e.g., surrender charges, mortality and expense charges, administrative expenses) although amounts may differ between the similar contracts.

3.6.1 Subsequent accounting for deferred sales inducements

Deferred sales inducement assets associated with universal life-type contracts are required to be amortized on a straight-line basis and do not accrete with interest in accordance with ASC 944-30-35-18. For deferred sales inducement assets, the current guidance explicitly requires that amortization be based on the same methodology, factors, and assumptions used to amortize DAC. This is because these also represent past payments or fees that have been deferred. Therefore, these balances are subject to the same amortization approach as DAC. However, because sales inducements are amount payable to policyholders, the amortization is recognized as a component of benefit expense, and not as a component of acquisition expenses.

While DAC is a deferred third-party cost similar to a debt issuance cost, and therefore not subject to an impairment test, the nature of sales inducement assets relating to universal life insurance contracts is different. These balances are contract cash flows and therefore should be included in universal life insurance premium deficiency tests. That is, the deferred amounts would be part of the net liability balance that would be compared to future net cash flows to determine if the net liability balance is sufficient to cover future net cash outflows.

3.7 Modifications or exchanges of insurance contracts

An insurance entity's new products may be more attractive than an existing product. As a result, insurance entities may give policyholders the ability to replace their existing policies. Additionally, insurance entities modify certain provisions in existing policies to improve the marketability of their insurance products in a changing and innovative marketplace, or to decrease the operational or administrative burden of accounting and servicing a wide variety of policy types.

Guidance relating to accounting by insurance entities for DAC in connection with modifications or exchanges of insurance contracts applicable to all short-duration and long-duration contracts, including investment contracts, and reinsurance contracts is in ASC 944-30-35-24 through ASC 944-30-35-63. The fundamental concept is that DAC relates to a contractual relationship and not a customer relationship. Modifications of insurance contracts that substantially change the replaced contracts should be considered as new contracts and the related DAC written off. Internal replacements of insurance contracts that do not substantially change the replaced contracts are considered continuations of the replaced contracts and the related DAC is maintained.

In addition to the ASC guidance, the AICPA issued guidance in a question-and-answer format with the AICPA Technical Questions and Answers (TQA) publication, specifically section 6300 – Insurance companies. Figure IG 3-2 provides an index of the relevant TQAs.

Figure IG 3-2
Index of AICPA TQAs addressing modifications and replacements

TQA #	Subject	IG Guide Reference
6300.25	Integrated/Nonintegrated Contract Features in Applying FASB ASC 944-30	IG 3.7.4
6300.26	Evaluation of Significance of Modification in Applying FASB ASC 944-30	IG 3.7.5.1
6300.27	Changes in Investment Management Fees and Other Administrative Charges in Applying FASB ASC 944-30	IG 3.7.5.2
6300.28	Definition of Reunderwriting for Purposes of Applying FASB ASC 944-30	IG 3.7.3 & IG 3.7.5.1
6300.29	Contract Reinstatements in Applying FASB ASC 944-30	IG 3.7.5

6300.30	Commissions Paid on an Increase in Insurance Coverage or Incremental Deposits in Applying FASB ASC 944-30	IG 3.7.6.4
6300.31	Participating Dividends and the Interaction of Guidance in FASB ASC 944	IG 3.7.4
6300.32	Premium Changes to Long Duration Contracts in Applying FASB ASC 944-30	IG 3.7.1.1
6300.33	Evaluation of Changes Under FASB ASC 944-30-35-37(a)	IG 3.7.5.1
6300.34	Nature of Investment Return Rights in FASB ASC 944-30-35-37(b)	IG 3.7.5.2

3.7.1 Application of the internal replacements accounting model

ASC 944-30-35-24 through ASC 944-30-35-56 identifies a sequence of steps to determine whether an internal replacement results in a substantially changed contract.

Before applying these steps, an insurer must determine if the modification or exchange meets the definition of an internal replacement, as defined in ASC 944.

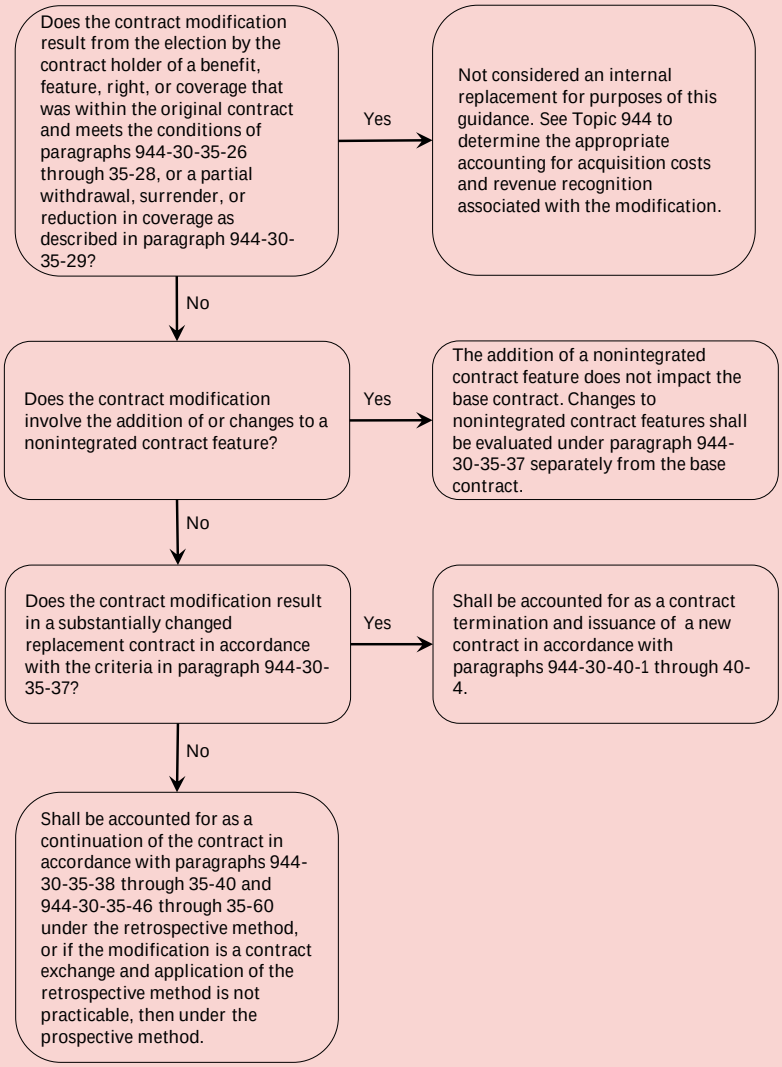
Definition from ASC 944-30-20

Internal Replacement: A modification in product benefits, features, rights, or coverages that occurs by a contract exchange; by amendment, endorsement, or rider to a contract; or by the election of a benefit, feature, right, or coverage within the contract.

This initial determination highlights that certain actions executed by an insurance entity, such as changing cost of insurance charges, interest crediting rates, or similar provisions within ranges outlined in the contract, without any other changes in benefits or coverages, are generally not modifications to the contract and are not internal replacements.

ASC 944-30-55-11

A flowchart summarizing the accounting model set out in the Internal Replacement Transactions Subsections of this Subtopic follows.



3.7.1.1 *Internal replacements*

An internal replacement is a modification in product benefits, features, rights, or coverage that occurs by any of the following:

- Legal extinguishment of one contract and issuance of another contract (referred to as a contract exchange)
- Amendment of, endorsement or rider to, an existing contract
- Election of a benefit, feature, right, or coverage within a contract

The definition of an internal replacement is very broad. Modifications of insurance contracts take a variety of legal forms and as such, the substance of the modification, rather than its legal form, dictates the accounting for changes to existing contracts. Therefore, most modifications to insurance contracts may be considered internal replacements and subject to analysis under ASC 944-30-35-24 through

ASC 944-30-35-56. Furthermore, while "product feature" is not a defined term, we believe this term includes premiums, fees, or other assessments, and thus changes in premiums, fees, or assessments not within ranges outlined in the original contract, whether increases or decreases, would be considered internal replacements subject to analysis under the internal replacements accounting model.

Question IG 3-11 addresses whether changes considered in the initial contract are modifications.

Question IG 3-11

Are changes to premium rates on a long-duration insurance contract for which the insurer has the contractual right to change premium rates considered modifications as contemplated in ASC 944-30?

PwC response

It depends. Changes to a group insurance contract's premium or benefits based on the insurer's consideration of the actual experience of an individual contract holder (i.e., an individual employer) or the renegotiation of premiums or benefits with an individual contract holder, even without any explicit underwriting, generally would meet the definition of an internal replacement subject to analysis under ASC 944-30. In situations in which the revised premium rate is determined based on a formula specified in the contract that involves objective inputs not subject to insurer discretion or the change is made for an entire class of contracts, the revision would generally not meet the definition of an internal replacement.

3.7.2 *Modifications from contract holder elections within original contract*

In accordance with ASC 944-30-35-26, modifications resulting from the election by the contract holder of a feature or coverage that was within the original contract are not internal replacements if all of the following conditions are met:

ASC 944-30-35-26

a. The election is made in accordance with terms fixed or specified within narrow ranges in the original contract.

b. The election of the benefit, feature, right, or coverage is not subject to any underwriting.

c. The insurance entity cannot decline to provide the coverage or adjust the pricing of the benefit, feature, right, or coverage.

d. The benefit, feature, right, or coverage had been accounted for since the inception of the contract.

ASC 944-30-35-26 does not explicitly define what a "narrow" range is as used in the first criterion. However, the terms must be specific enough that the contract holder is able to evaluate whether to elect the feature in current and future market conditions and the range should be narrow enough to provide a meaningful guarantee to the contract holder. Contractual provisions that allow the contract holder to add future coverages at then-current rates, subject to stated minimums and maximums, generally are not specific enough to meet the first criterion. An important factor in addressing this criterion is whether the range has commercial substance to the contract holder's decision to invest in

the original contract. If inclusion of the option and the option price range made an economic difference to the contract holder as compared to a contract that instead provides for election of the option at the then-current market rate, this would indicate a narrow range.

With respect to the second criterion, in certain situations, an insurer may perform limited procedures for the election of a specific benefit included in the original contract. To the extent the procedures are limited and do not involve insurer discretion or judgment to accept the risk or price the election, the procedures would typically not be considered underwriting.

The rationale for the last criterion is that if the provision in question was truly part of the original contract, the entity should have accounted for the feature since the contract's inception and therefore election of the feature is not a new contract (i.e., the option to elect the feature was accounted for as a derivative under ASC 815, market risk benefit, or as an additional liability in accordance with the applicable guidance in ASC 944). If a contract feature should have been accounted for under ASC 815 or ASC 944, and the entity has either been accounting for it since contract inception or has made a determination at the inception of the contract (and since) that the provision was/is immaterial, the election of the feature would not be an internal replacement.

ASC 944-30-35-28 treats the accumulation phase of a deferred annuity contract as separate and distinct from the annuitization phase, even if annuitization is in accordance with terms fixed in the original contract. Therefore, the existence of an annuitization option in a deferred annuity will not change the requirement to amortize DAC over the accumulation (deferral) phase of an annuity contract.

3.7.3 *Modifications – partial withdrawals, surrenders, coverage reductions*

In accordance with ASC 944-30-35-29, partial withdrawals, surrenders, or reductions in coverage allowed by the original contract or required by state law or regulation are not internal replacements as long as there are no re-underwriting or other modifications to the contract that would require evaluation under ASC 944-30-35-37.

Question IG 3-12 addresses whether certain modifications required by state law are internal replacements.

Question IG 3-12

In the event that policyholders fail to make premium payments in accordance with a previously purchased whole-life policy, all states have enacted non-forfeiture laws that require insurers to modify coverage on existing policies rather than allowing the contract to terminate. These modifications include reducing the face amount of the existing policy to a level that has been fully funded by previous premium payments (known as reduced-paid-up insurance) or conversion of a whole life policy to extended term insurance. Are these modifications considered internal replacements?

PwC response

No. These changes would meet the provisions of ASC 944-30-35-29 and, therefore, would not be internal replacements.

3.7.4 *Integrated and nonintegrated contract features*

Internal replacements that do not meet the criteria established in ASC 944-30-35-26 through ASC 944-30-35-28 or ASC 944-30-35-29 require further analysis. The next step in the analysis is to determine whether the internal replacement is a nonintegrated contract feature. If the internal replacement meets the definition of a nonintegrated feature, as defined in ASC 944-30-35-30 and ASC 944-30-35-31, it is not considered a substantial change in the original (base) contract, and no further analysis is required. The nonintegrated feature would be accounted for similar to a separately issued contract. If the contract feature being modified is integrated, the transaction should be analyzed under ASC 944-30-35-37 to determine if the original contract is substantially changed. Figure IG 3-3 summarizes the definitions of integrated and nonintegrated features for short-duration and long-duration contracts.

Figure IG 3-3

Definitions of integrated and nonintegrated features for short-duration and long-duration contracts

Contract type	Integrated	Nonintegrated
Long-duration (ASC 944-30-35-30)	Contract features for which the benefits can only be determined in conjunction with the account value or other contract holder balances related to the base contract	Contract features for which the determination of benefits provided by the feature is not related to or dependent on the account value or other contract holder balances of the base contract
Short-duration (ASC 944-30-35-31)	Contract features for which there is explicit or implicit re-underwriting or repricing of existing components of the base contract	Contract features that provide coverage that is underwritten and priced only for that incremental insurance coverage and do not result in the explicit or implicit re-underwriting or repricing of other components of the contract

Underwriting and pricing for nonintegrated features are typically executed separate from other components of the contract and theoretically could be purchased separately as an insurance contract, similar to a rider. In contrast, an integrated contract feature is one in which benefits provided by the feature can be determined only in conjunction with the account value or other balance relating to the base contract. However, the fact that the premiums to fund the additional or modified benefits are paid from the base contract's value is not by itself an indication that the benefit feature is integrated.

In limited circumstances, it may not be clear if a contract feature is integrated or non-integrated, such as changes to the premium payment period of a life insurance contract from 10 years to 5 years, when the death benefit remains unchanged and the option was not part of the original contract provisions. As noted in TQA 6300.25, a contract feature is presumed to be integrated unless it clearly meets the definition of a non-integrated contract feature.

An example of an integrated contract feature for a short-duration contract is the addition of, or change to, an experience refund provision in a worker's compensation insurance contract.

Examples of integrated contract features for long-duration contracts include guaranteed minimum death benefits (GMDBs), guaranteed minimum income benefits (GMIBs), guaranteed minimum

accumulation benefits (GMABs) and guaranteed minimum withdrawal benefits (GMWBs), as well as no lapse guarantees and secondary guarantees. These are integrated contract features because, in all cases, the benefit provided can only be determined in conjunction with the account value of the annuity contract.

Examples of nonintegrated contract features for short-duration contracts include a newly acquired automobile added to an existing personal automobile contract and a personal articles floater added to a homeowner's contract.

Examples of nonintegrated contract features for long-duration contracts may include a long-term care rider added to an annuity or disability contract, a term life rider added to an annuity contract, and an accidental death benefit feature added to a traditional life contract.

Waiver of premium benefits added to a traditional life contract is considered a nonintegrated modification. When added to a universal life type contract, waiver of premium could be integrated or nonintegrated, depending on the design of the benefits. A universal life waiver benefit that pays a fixed target premium would be considered nonintegrated but a similar benefit that pays cost of insurance (COI) charges would be considered integrated because the account balance is a factor in the determination of the COI charge.

Question IG 3-13 discusses whether paid-up addition features are internal replacements.

Question IG 3-13

Do paid-up addition features (benefit allowing policyholders to use dividends to purchase additional increments of insurance) offered under certain participating life insurance meet the definition of an internal replacement? If so, are these features considered integrated or nonintegrated features?

PwC response

Paid-up addition features may in certain instances meet the conditions relating to contract holder elections as described in ASC 944-30-35-26 and as such would not be considered internal replacements. See IG 3.7.2 for additional information on the contract holder election criteria. However, in other instances, such paid-up additions may be considered internal replacements, but would generally meet the criteria to be considered a nonintegrated feature.

If the internal replacement meets the definition of a nonintegrated feature, it is not considered a substantial change in the base contract, and no further analysis is required. The nonintegrated contract feature or coverage would thus be accounted for in a manner similar to a separately issued contract. Furthermore, as nonintegrated contract features, benefits, or coverages are more akin to separate contracts, any future modifications to such features are evaluated on a stand-alone basis (i.e., apart from the existing base contract).

3.7.5 Determination if substantially changed contract

If the internal replacement involves integrated contract features or coverages, an insurance entity is required to determine whether the contract has changed substantially because of the modification. A modified contract that is substantially unchanged from the replaced contract should be accounted for as a continuation of the replaced contract, whereas a contract modification that substantially changes

the replaced contract should be accounted for as an extinguishment of the replaced contract and the issuance of a new contract in accordance with ASC 944-30-35-36.

An internal replacement involves contracts that are substantially unchanged only if all of the conditions noted in ASC 944-30-35-37 are met.

ASC 944-30-35-37

An internal replacement (other than those described in paragraphs 944-30-35-26 through 35-29) is determined to involve contracts that are substantially unchanged only if all the following conditions exist:

a. The insured event, risk, or period of coverage of the contract has not changed, as noted by no significant changes in the kind and degree of mortality risk, morbidity risk, or other insurance risk, if any.

b. The nature of the investment return rights (for example, whether amounts are determined by formulas specified by the contract, pass through of actual performance of referenced investments, or at the discretion of the insurer), if any, between the insurance entity and the contract holder has not changed.

c. No additional deposit, premium, or charge relating to the original benefit or coverage, in excess of amounts specified or allowed in the original contract, is required to effect the transaction; or if there is a reduction in the original benefit or coverage, the deposit, premiums, or charges are reduced by an amount at least equal to the corresponding reduction in benefits or coverage.

d. Other than distributions to the contract holder or contract designee or charges related to newly purchased or elected benefits or coverages, there is no net reduction in the contract holder's account value or, for contracts not having an explicit or implicit account value, the cash surrender value, if any.

e. There is no change in the participation or dividend features of the contract, if any.

f. There is no change to the amortization method or revenue classification of the contract.

If any of the conditions are not met, an internal replacement is determined to involve a replacement contract that is substantially changed from the replaced contract.

Example 2 (see paragraph 944-30-55-33) illustrates the application of this guidance.

If any of these conditions are not met, an internal replacement is considered a replacement contract that is substantially changed from the replaced contract. The analysis is performed using the terms of the contract immediately before and after the modification.

Question IG 3-14 addresses whether reinstated contracts are substantially unchanged.

Question IG 3-14

An insurance entity reinstated a lapsed contract for which it no longer had an obligation to pay claims. Does the reinstated contract meet the conditions of a substantially unchanged contract?

PwC response

If an insurer decides to reinstate a lapsed contract for which it no longer had an obligation to pay claims, the lapsed contract would have been extinguished and the reinstated contract would be considered a newly issued contract for accounting purposes at the date the reinstatement occurs. The reinstated contract would not meet the conditions of a substantially unchanged contract as the lapsed contract has already been terminated.

3.7.5.1 *Changes in insured event, risk, or period of coverage*

The evaluation of whether there are significant changes in insurance risk or period of coverage is done prospectively as events occurring prior to the internal replacement are irrelevant to the replacement transaction. Therefore, when assessing the significance of a change in insurance risk or the period of coverage, the remaining period of coverage of the replaced contract is compared to the remaining period of coverage provided by the replacement contract. The prospective comparison is consistent with the guidance for debt modifications in ASC 470-50-40.

Judgment must be used to determine whether there are significant changes in the "degree" of mortality, morbidity, or other insurance risk, considering the specific facts and circumstances of the modification. The focus should be on the substance of the changed risks of the contract between the insurance entity and the contract holder. The guidance in ASC 944-30-35-37(a) does not prescribe a specific approach for analyzing the significance of the change in insurance risk. However, the implementation guidance of Example 2 in ASC 944-30-55-33 through ASC 944-30-55-76 provides several example approaches that could be applied when assessing the change in the degree of insurance risk for various products and features.

Examples of factors to consider in determining whether there has been a significant change in insurance risk because of an internal replacement include:

- Changes in the actuarially estimated costs of benefit features (e.g., death benefits, claim costs)
- Changes in the relationship between the expected cost of the benefit and the charges for the benefit, as described in ASC 944-30-55-39 with regard to a universal life contract.
- Changes in the benefit ratio (i.e., comparing the change in the relationship between future projected guarantee benefits and total assessments under the contract).
- Changes in the net amount at risk before and after the modification

Entities should develop accounting policies for assessing the significance of a change in insurance risk in an internal replacement and consistently apply those policies for similar types of internal replacements. Certain approaches may be more appropriate than others depending on the type of internal replacement. When selecting an assessment approach, consideration should be given to the substance of the change between the insurer and the contract holder.

When assessing the replacement of a return-of-premium GMDB with a ratchet-type GMDB, the implementation guidance in ASC 944-30-55-65 concludes that although the actual mortality event is the same, the risk has changed because of the combined effects of mortality and investment events. In arriving at this conclusion, the change was analyzed using the gross expected mortality costs as an indicator of a significant change in the degree of mortality risk. ASC 944-30-55-66 has an example of a change in MRB benefits that is not a substantial change as the mortality costs remain similar.

Question IG 3-15 addresses how to consider re-underwriting under ASC 944-30-35-37(a).

Question IG 3-15

Would the re-underwriting of a contract in and of itself indicate a change in the kind or degree of insurance, thereby precluding an insurance entity from meeting criterion in ASC 944-30-35-37(a)?

PwC response

It depends. The re-underwriting of an entire contract would be considered an indicator of a substantial change in the insurance risk rather than an absolute requirement. Situations in which more limited procedures are performed, especially those that involve only a specific risk or component of a contract and do not involve insurer judgment or discretion with respect to acceptance or rejection of the insured or discretion as to price, do not appear to meet the definition of re-underwriting. An example of a more limited procedure would be one in which limited procedures are performed to validate an insured's statement that they are currently a non-smoker. This would generally not be considered re-underwriting. Facts and circumstances should be carefully reviewed to determine whether there has been a re-underwriting as part of the analysis in ASC 944-30-25-37(a). However, it is also important to note that the lack of underwriting is not, by itself, sufficient to conclude that the change is not substantial.

3.7.5.2 Changes in the nature of investment return rights

The guidance in ASC 944-30-35-37(b) is principles based and, as such, requires qualitative considerations to assess changes in the nature of investment returns. We believe that entities should use their best judgment when developing an approach for making this assessment, and consistently apply the approach for similar types of internal replacements.

In many cases, the evaluation of the nature of investment return rights is straightforward. The guidance is clear that changing the investment crediting rate from one type of return to another (e.g., from a pass through return to a formulaic return or to a return based on the discretion of the insurance entity) represents a change in the nature of the investment return rights. Therefore, replacing a fixed or general account product with a variable product will result in a substantially changed contract. In addition, adding an investment return floor, such as a GMIB, GMAB, or GMWB, to a variable annuity without any existing minimum guarantees, or capping of the return such that actual returns are not passed along to the contract holder, would result in a substantially changed contract.

Another example of a change in the nature of investment return rights would be a change in contract holder liquidity rights. For example, a variable annuity product may have different types of guarantees: a GMIB (payable in installments over a specified annuitization period; a GMAB (payable at the end of a specified period); or a GMWB (payable during the accumulation phase of the contract). Because each of these features provides for different timing of cash flow accessibility to the contract holder, the change in contract holder liquidity rights is a change in the nature of the investment rights.

In other cases, the determination as to whether a change to investment return rights constitutes a change in its nature will be less straightforward. These include situations when a component of an investment return formula has changed, such as a change in the strike price formula or strike price amount of an investment return floor. Changing the strike price of a guarantee in a variable annuity with a GMAB ratchet that is currently out of the money (i.e., the guarantee is below the current variable annuity account balance) to a next generation of the GMAB ratchet, with the guaranteed floor reset at the modification date to the current account balance (i.e., at the money) is one example. This example, and other situations requiring analysis of changes in the nature of investment return rights, require careful consideration of the facts and circumstances in order to determine if the revision fundamentally changes the nature of the investment return rights. Changes to formulaic inputs may be of such a degree that they change the fundamental nature of the investment return rights.

Question IG 3-16 addresses whether changes in investment management fees are a substantial change.

Question IG 3-16

Are changes to investment management fees and other administrative charges considered under paragraph ASC 944-30-35-37 when determining whether a contract is substantially unchanged?

PwC response

Changes to investment management fees and other administrative charges in accordance with terms and within ranges specified in the original contract, without any other change in benefits or coverages, are not considered modifications. For changes in administrative fees not meeting those criteria (e.g., a change from a flat fee plus percentage of assets to a pure percentage of assets fee), the change should be evaluated under ASC 944-30-35-37(b) in conjunction with investment return rights. ASC 944-30-35-37(a) and ASC 944-30-35-37(c) are not applicable to changes in administrative fees, but instead were meant to apply to changes in insurance risk or charges relating to insurance risk.

3.7.5.3 *Changes in deposits, premiums or other charges*

The purpose of the criterion in ASC 944-30-35-37(c) is to prevent a change in the deposits, premiums, or other charges relating to the original coverage, which would be indicative that the economics of the replaced contract have changed. A change in the deposit, premium, or other charges are not prohibited as long as the change relates to the new change in the benefit or coverage and is not in excess of the amount that is commensurate with the change in benefit provided.

3.7.5.4 *Change to policyholder account value or cash surrender value*

Under the criterion in ASC 944-30-25-27(d), there can be no net reduction in the contract holder's account value or no reduction in the cash surrender value for contracts not having an explicit or implicit account value, other than distributions to the contract holder or contract designee or charges related to newly purchased or elected benefits or coverage.

If there is a net reduction in account value or similar feature, this would be equivalent to a surrender charge and thus indicative of a change in the substance of the original contract. For a universal life-type, limited payment, or investment contract that has an explicit account balance, changing the surrender charge amount or surrender charge period would not be considered a modification until surrender occurs. This is consistent with the concept inherent in ASC 944-30-35-24 that a change is not a change until elected by the contract holder.

3.7.5.5 *Change in the participation or dividend features*

In accordance with ASC 944-30-35-37(e), changing the participation or dividend features of a contract would be considered a substantial change. Changing dividend scales, by themselves, is not considered a violation of this provision. However, the addition of a dividend feature to an individual life contract, or the addition of an experience refund provision to a group contract, are examples of changes in the participation or dividend feature that would cause the modification to fail this provision and thus be considered a substantial change.

3.7.5.6 *Change to the amortization method or revenue classification*

If the contract modification causes the accounting model to change, for example, from a contract accounted for as a traditional life-insurance contract to a contract accounted as a universal life-type contract, the modification would result in a substantially changed contract under ASC 944-30-35-37(f).

3.7.6 *Accounting for a substantially unchanged contract*

When an internal replacement results in a replacement contract that is substantially unchanged from the replaced contract, any unamortized deferred acquisition costs (DAC), unearned revenue liabilities, and deferred sales inducement assets associated with the replaced contract should continue to be deferred and amortized or earned in connection with the replacement contract (i.e., the internal replacement should be accounted for as a continuation of the replaced contract). Other balances associated with the replaced contract, such as any liability for GMDBs or GMIBs, should continue to be recognized as if the replacement contract is a continuation of the replaced contract. Attributed fees for MRBs would remain unchanged if the MRB is unchanged. However, if an MRB feature was changed but determined not to be a substantial change (as in the example in ASC 944-30-55-66), there may be an incremental insignificant change to the attributed fee. For example, if the fair value of the new incremental MRB costs was equal to fifteen basis points of account balance, then fifteen basis points might be added to the existing attributed fee going forward.

Additionally, if the replaced contract was acquired in a business combination, any present value of future profits (PVFP) or value of business acquired (VOBA) established in accordance with ASC 944-805-25-3 would be accounted for in a similar manner. See IG 12 for accounting considerations related to contracts acquired in conjunction with a business combination.

3.7.6.1 *Substantially unchanged short-duration contracts*

As required by ASC 944-30-35-52, for short-duration contracts, the replacement contract is viewed as a prospective revision to the replaced contract. The unamortized DAC is unchanged at the time of the replacement with the future recognition of unearned premium and amortization of DAC adjusted accordingly on a prospective basis based on the revised terms. In accordance with ASC 944-30-35-54, when the modification is a reduction in benefits with a directly proportionate reduction in premiums, the modification should result in an immediate proportionate reduction in unamortized DAC rather than a prospective revision.

3.7.6.2 *Substantially unchanged long-duration contracts*

For long-duration contracts, other than certain investment contracts noted in IG 3.5.3, the replacement contract that is substantially unchanged is viewed as a prospective revision to the

replaced contract in accordance with ASC 944-30-35-46. The unamortized DAC is unchanged at the time of the replacement with the future amortization adjusted on a prospective basis for any change in the expected life of the replacement contract. In accordance with ASC 944-30-35-50 and ASC 944-30-35-51, any related liability for future policy benefits or market risk benefits is required to be updated as described in ASC 944-40-35 and other balances that are determined based on activity over the life of the contract, such as an additional liability for death or other insurance benefits, is calculated considering the term of the replacement contract and activity during the term of the replaced contract.

3.7.6.3 Substantially unchanged investment contracts

ASC 944-30-25-48 requires that for certain investment contracts accounted for as interest-bearing or other financial instruments for which DAC is amortized using the interest method under ASC 310-20, the replacement contract represents revisions to the cash flows of the replaced contract. As such, the unamortized DAC and deferred sales inducement assets are adjusted accordingly. See IG 3.5.3 for information about investments contracts accounted for as interest-bearing or other financial instruments.

3.7.6.4 Costs – substantially unchanged internal replacements

Costs incurred on internal replacements that result in a substantially unchanged contract should be accounted for as policy maintenance costs and expensed as incurred (i.e., the costs should not be deferred) in accordance with ASC 944-30-35-55.

ASC 944-30-35-56 requires any portion of renewal commissions paid on the replacement contract that meet the criteria for deferral in accordance with ASC 944-30 continue to be deferrable if they do not exceed the amount of deferrable renewal commissions on the replaced contract. See IG 3.4 for further guidance on the criteria for deferral of acquisition costs. The guidance is intended to prevent the deferral of additional costs incurred related to substantially unchanged contract modifications that do not result in additional insurance coverage or incremental deposits. For example, if a contract were exchanged for a new generation of the contract, and the agent was paid a commission on the rollover of the existing account balance, the commission would not be deferrable. Additionally, to the extent a commission is paid at a rate in excess of the rate provided at the replaced contract's inception, the excess commission would not be deferrable. The guidance does not prevent the deferral of commissions paid on premiums attributable to an increase in insurance coverage or incremental deposits not previously provided for in the contract.

3.7.6.5 Sales inducements – substantially unchanged internal replacements

ASC 944-30-35-57 through ASC 944-30-55-60 indicates that if a surrender charge assessed on the replaced contract is offset by an immediate sales inducement on the replacement contract, insurance entities should offset the immediate sales inducement against the surrender charge to determine whether there has been a net reduction in the contract holder's account in accordance with ASC 944-30-35-37(d). The sales inducement liability will be recorded as part of the liability for policy benefits over the period in which the contract must remain in force to qualify for the inducement or at the crediting date, if earlier. The criteria in ASC 944-30-25-6 through ASC 944-30-25-7 for recognition of a related sales inducement asset cannot be satisfied in these circumstances because the sales inducement was not specifically identified in the original contract. See IG 3.6 for the criteria for deferring sale inducement assets.

Example IG 3-10 illustrates the accounting for a sales inducement offered with an internal replacement of an investment contract.

EXAMPLE IG 3-10

Sales inducement offered with an internal replacement of an investment contract

Insurance Company offers a sales inducement in conjunction with the conversion of an investment contract to a universal life contract. The account balance of the replaced contract immediately prior to the internal replacement was $10,000. Upon termination of the replaced contract, a surrender charge of $500 was applied and a $500 sale inducement bonus was offered in conjunction with the new internal replacement contract.

How would Insurance Company apply the guidance in ASC 944-30-35-57 and what would be the resulting accounting?

Analysis

The account balance of the investment contract prior to surrender charges is $10,000 and a $500 surrender charge is imposed. The resulting $9,500 credited to the replacement contract account value (prior to consideration of the sales inducement) would result in a substantial change to the contract. However, since an immediate bonus of $500 was credited to the replacement contract, there would be no net reduction to the balance available to the contract holder and the internal replacement would result in a contract that is substantially unchanged provided the other conditions of ASC 944-30-25-37 are satisfied. Additionally, there would be no net impact on earnings as the $500 surrender charge would be directly offset by the $500 immediate sales inducement bonus that is expensed as incurred.

3.7.7 *Contract assessments*

ASC 944-30-35-61 indicates that front-end fees assessed in connection with an internal replacement of a long-duration contract are evaluated for deferral in accordance with ASC 944-605.

3.7.8 *Substantially changed contract (extinguishment of replaced contract)*

ASC 944-30-40-1 through ASC 944-30-40-4 requires a replacement contract that is substantially changed from the replaced contract to be accounted for as an extinguishment. Under the guidance, any balances associated with the original replaced contract are derecognized. These balances may include unamortized DAC, PVFP, unearned revenue liabilities, deferred sales inducement assets, liability for future policy benefits, or market risk benefits. The replacement contract is accounted for as if it were a newly issued contract. As such, acquisition costs related to the replacement contract should be evaluated for deferral in accordance with the provisions of ASC 944-30. See IG 3.4 for further guidance on the criteria for deferral of acquisition costs.

ASC 944-30-40-1 through ASC 944-30-40-4 does not provide explicit guidance on the amount of non-cash consideration used to calculate the gain or loss on extinguishment of the replaced contract and the initial premium for the newly issued contract when an internal replacement results in a substantially changed contract.

One way practice has viewed this non-cash transaction is that the consideration for the extinguishment and the premium for the replacement contract would be the same amount adjusted for

any cash exchanged, such as additional premiums or deposits paid by the policyholder for the replacement contract. The non-cash consideration could be the sum of the account balance carried over to the replacement contract from the replaced contract and the fair value of any off-market terms, including benefits, guarantees, premiums, or deposits. Off-market terms are those that are different from terms offered to a new contract holder for the same or similar contract.

An example of an off-market feature on a variable annuity replacement contract would be a GMDB, GMIB, GMAB, or GMWB that has a starting floor guarantee amount above the new account balance (i.e., in the money) but has related policy fees comparable to the fees for a similar guarantee that has a starting floor guarantee equal to the new account balance (i.e., at the money).

Example IG 3-11 illustrates the considerations when determining whether the lapse and reinstatement of a long-duration life insurance contract results in a contract extinguishment

EXAMPLE IG 3-11

Determining whether the lapse and reinstatement of a long-duration life insurance contract results in a contract extinguishment

Insurance Company issued a long-duration life insurance contract that lapsed due to nonpayment of premium. As a result, Insurance Company has no obligation to pay claims during the lapse period. Under the terms of the contract, the policyholder can reinstate the contract within a specified period from the lapse date with no ability of Insurance Company to re-underwrite this risk. In the period between lapse and reinstatement, if the insured dies, there is no death benefit paid. Should the lapse and reinstatement be treated as a contract extinguishment?

Analysis

An extinguishment occurs when an insurance enterprise has no further obligation to pay claims due to the lapse of a contract. However, in the fact pattern above, the policyholder has the unilateral right to reinstate the contract without any underwriting or other qualifying criteria. Therefore, although Insurance Company has no obligation to pay a death benefit claim during the period between lapse and reinstatement, its obligation to the policyholder has not been totally extinguished. Insurance Company may have future death benefit exposure under the current contract if the policyholder decides to reinstate the policy by paying a premium, and thus the contract would not be considered extinguished. In addition, the lapse in coverage would not be considered a contract modification because it was part of the original contract provisions that such a lapse could occur without necessarily terminating the contract. Therefore, neither a contract extinguishment nor a modification has occurred.

In other fact patterns, a policyholder may not have the unilateral right to reinstate the contract (either through the contract terms or a past practice that makes it legally enforceable), or the insurer may have an administrative practice of reinstating lapsed contracts at its discretion while retaining the right to deny reinstatement. In such cases, a lapsed contract would result in an extinguishment for accounting purposes.

3.8 DAC for reinsurance contracts

There is DAC-related accounting for reinsurance contracts that is applicable for both the ceding company and the assuming reinsurer.

3.8.1 *Ceding company accounting of DAC*

In many reinsurance transactions, the ceding company will pay the reinsurer a reinsurance premium for reinsurance coverage, and receive a ceding commission from the reinsurer. The ceding commission represents the results of a negotiation for reimbursement to the cedant for both direct and indirect acquisition costs as well as other expenses and any transfer of profit in the premiums. ASC 944-30-35-64 addresses the ceding company's accounting for these proceeds.

> ASC 944-30-35-64
>
> Proceeds from reinsurance transactions that represent recovery of acquisition costs shall reduce applicable unamortized acquisition costs in such a manner that net acquisition costs are capitalized and charged to expense in accordance with the amortization guidance in this Section that applies to those unamortized acquisition costs.

Consistent with the guidance in ASC 944-30-35-64, the ceding allowance DAC offset is limited to the amount that represents recovery of acquisition costs deferred by the cedant. Any remaining amount (i.e., the portion of ceding commission above the amount representing recovery of DAC) should be deferred and amortized rather than recognized in income immediately. The net DAC balance is subject to the simplified DAC amortization model.

For long-duration contracts, the remaining amount should be included as a component of the cost of reinsurance. For short-duration contracts, we believe it would be appropriate to record any remaining commission (i.e., the "excess ceding commission") as an adjustment to unearned ceded premium. The rationale for this view is that reinsurance guidance explicitly acknowledges only two captions for recognition of consideration between the ceding company and the reinsurer: reduction in DAC and unearned ceded premium. However, due to the lack of specific guidance on this issue, we are aware of diversity in practice with regard to balance sheet and income statement classification for this deferred amount and its subsequent amortization. For example, the SEC staff has accepted the amortization of excess ceding commission as ceding commission income or as a reduction to other underwriting expenses.

3.8.2 *Assuming reinsurer accounting of DAC*

The assuming entity in a reinsurance transaction is in substance providing the same type of protection as a direct insurer. As a result, a reinsurer would follow the applicable direct insurance model for DAC deferral, recoverability, and amortization purposes per ASC 944-30-25-13.

3.9 Other DAC considerations

Other areas related to DAC that need specific consideration include the classification of DAC as a monetary or nonmonetary item and the translation implications for DAC denominated in a foreign currency.

3.9.1 *Foreign currency implications of DAC*

The classification of deferred acquisition costs (DAC) as monetary or nonmonetary items is dependent on the classification of the contract as either short duration or long duration. See IG 2 for a description of the various classification models. ASC 830-10-45-18 and ASC 255-10-55-1 require that DAC and related amortization for property and casualty contracts (short duration) be classified as nonmonetary items. DAC and related amortization for life insurance contracts (long-duration), on the other hand, would be classified as monetary items.

Nonmonetary assets and liabilities are initially measured using historical exchange rates with all aspects of the ongoing accounting for these items (e.g., amortization, impairment) measured in terms of the entity's functional currency. Monetary assets and liabilities are measured at the end of each reporting period based on the then-current exchange rates. This measurement gives rise to foreign currency gains and losses recorded in current period net income. See our *Foreign currency* guide (FX 5.4) for further information.

Question IG 3-17 addresses the exchange rate to be used to remeasure DAC.

Question IG 3-17

What is the appropriate exchange rate required for remeasurement of foreign currency transactions related to DAC on long-duration insurance contacts?

PwC response

ASC 830-10-45-18 dealing with foreign currency matters or ASC 255-10-55-1 dealing with changing prices require that DAC and related amortization for life insurance companies be classified as monetary amounts. Although BC 84 in the Basis for Conclusions of ASU 2018-12 observes that "deferred acquisition costs are not, in themselves, monetary items," ASC 830 and ASC 255 note that classification as a monetary item is a practical solution given the close relationship of DAC for life insurers to related monetary items (the insurance liabilities).

Monetary assets and liabilities are measured at the end of each reporting period based on the then-current exchange rates. This measurement gives rise to foreign currency gains and losses, which are recorded in current period net income.

Chapter 5: Long-duration contract liabilities

5.1 Long-duration contract liabilities — chapter overview

A long-duration insurance contract is one that generally is not subject to unilateral changes in its provisions and requires the performance of various functions and services (including insurance protection) for an extended period. Long-duration insurance contracts are principally life, annuity, non-cancellable or guaranteed renewable accident and health, and disability.

ASC 944-40, *Claim costs and liabilities for future policy benefits,* establishes insurance entities' accounting and financial reporting for claims costs and liabilities for future policy benefits. This chapter focuses on the accounting for long-duration insurance contracts that fall within the following classifications:

- Non-participating traditional life insurance contracts
- Limited payment contracts
- Universal life-type contracts
- Investment contracts
- Market risk benefits
- Derivatives and embedded derivatives in insurance and investment contracts
- Additional liabilities for annuitization, death or other insurance benefits

Refer to IG 2.4 for the framework for determining the classification of long-duration life insurance contracts.

This chapter also addresses policyholder dividends and the concept of "shadow" adjustments. See IG 5.9 and IG 5.10 for further information, respectively.

5.2 Measurement – nonparticipating traditional life insurance

Traditional long-duration contracts provide a specified, fixed amount of insurance benefit in exchange for a fixed premium, paid either upfront, over a fixed number of years, or payable each year the policy is kept in force (e.g., whole-life insurance, guaranteed renewable term-life insurance, or long-term disability insurance).

Premiums on nonparticipating traditional long-duration insurance contracts are recognized in revenue when due. The liability for future policyholder benefits is recognized on the balance sheet using a net premium measurement approach whereby the liability is accrued as a proportion of premium revenue recognized. The period accruals are reported as benefit expense. If actual experience unfolds exactly as projected, reported underwriting profit in each year will be a constant percentage of premiums. The aggregate liability for future policy benefits reflects the insurance entity's contractual obligations under insurance policies in force as of the balance sheet date using current assumptions. This calculation is performed by grouping similar contracts into cohorts and using specialized actuarial methods.

5.2.1 *Estimating the liability for future policy benefits*

ASC 944-40-25-8 outlines the income statement margin approach, which requires the liability for future policy benefits for nonparticipating traditional life insurance and limited-payment contracts to be determined such that expected insurance benefits (i.e., estimated future death, disability or other claims and any surrender benefits) are accrued in proportion to premium revenue recognized. This is accomplished through a method referred to as the "net premium" approach.

The liability is determined as the present value of future benefits and related claims expenses less the present value of future net premiums, where net premium is gross premium under the contract multiplied by the net premium ratio. As noted in ASC 944-40-35-7B, in no event should the liability for future policy benefits be less than zero at the level of aggregation at which liabilities are measured.

Figure IG 5-1 outlines the formula for determining the net premium ratio.

Figure IG 5-1
Formula for the net premium ratio

$$\text{Net premium ratio} = \frac{\text{Present value of benefits and related claim expenses}}{\text{Present value of gross premiums}}$$

The net premium ratio is capped at 100% (i.e., net premiums cannot exceed gross premiums). The liability can also be thought of as premium revenue recognized from the inception of the contract multiplied by the net premium ratio, less benefits and expenses already paid as long as the net premium ratio is updated for actual experience and stays below the 100% cap. See IG 5.2.5 for further details on the measurement of loss contracts.

Related claim expenses include termination and settlement costs and exclude acquisition costs and non-claim related costs, such as costs relating to investments, general administration, policy maintenance, product development, market research, and general overhead or any other costs that are required to be expensed under ASC 944-720-25-2.

The premiums, benefits, and claims-related expenses cash flows are estimated using methods that include assumptions, such as estimates of mortality, morbidity, terminations, and claim-related expenses, and the possible impact of inflation on those expenses. Benefits include all guaranteed cash flows to the policyholder, including coupons, annual endowments, and conversion privileges. See IG 5.2.2 for additional details surrounding reserve assumptions utilized in the net premium ratio.

Example IG 5-1 illustrates the calculation of the net premium ratio at issue date for a cohort of policies and the resulting liability of future policy benefits.

EXAMPLE IG 5-1

Calculation of initial net premium ratio and liability of future policy benefits

Insurance Company A has a cohort of traditional life insurance contracts with estimated cash flows as detailed in the chart below. The example is based on Example 6 in ASC 944-40-55, *Updating of Assumptions Used in the Measurement of the Liability for Future Policy Benefits*.

How is the initial net premium ratio calculated and what journal entries should be recognized in Year 1?

Analysis

The net premium ratio is calculated based on the following cash flows, and then multiplied by the gross premium to yield the net premium in each period. Discounting of cash flows to derive the net premium ratio uses the original contract issuance discount rate, which for simplicity of illustration, is assumed to be 0%.

Year	Benefits	Gross premiums (A)	Net premiums (A*71.1%)
1	$200.0	$500.0	$355.4
2	208.8	474.5	337.2
3	216.1	450.3	320.0
4	222.2	427.3	303.6
5	227.0	405.4	288.1
6	230.7	384.6	273.3
7	233.5	364.8	259.2
8	235.3	346.0	245.9
9	236.3	328.1	233.2
10	236.5	311.2	221.1
11	236.0	295.1	209.7
12	235.0	279.7	198.8
13	233.4	265.2	188.5
14	231.3	251.4	178.6
15	228.7	238.3	169.3
16	225.8	225.8	160.5
17	222.5	214.0	152.1
18	219.0	202.8	144.1
19	215.1	192.1	136.5
20	211.1	182.0	129.3
Total	**$4,504.4**	**$6,338.4**	**$4,504.4**
Present value (0%)	**$4,504.4**	**$6,338.4**	**$4,504.4**

Net premium ratio		
Present value of total benefits and expenses (for Years 1-20)	(A)	$4,504.4
Present value of total gross premiums (for Years 1-20)	(B)	$6,338.4
Net premium ratio (A)/(B)	(C)	71.1%

The Year 1 ending balance for the liability for future policy benefits would be as follows:

Year 1 calculation	
Present value of future benefits (for Years 2-20)	$4,304.4
Less: Present value of future net premiums (for Years 2-20)	4,149.0
Liability for future policy benefits	$155.4

At the end of year 1, Insurance Company A would record the following journal entries to reflect the liability calculation and cash flows from premiums received ($500) and benefits paid ($200). In this example, actual amounts are equal to expected, and therefore benefit expense is equal to gross premiums of $500 multiplied by the net premium ratio of 71.1%.

Dr. Cash[1]	$300.0	
Dr. Benefit expense[2]	355.4	
Cr. Premium income		$500.0
Cr. Liability for future policy benefits		155.4

[1] Premiums collected of $500, less benefits paid of $200

[2] Benefits paid of $200, plus change in reserve of $155.4

See IG 5.3 for additional consideration for limited-payment contracts.

5.2.2 *Liability assumptions in the net premium ratio*

ASC 944-40-30-8 includes the assumptions required to be incorporated into the calculation of the net premium ratio used for the liability for future policy benefits:

- Discount rate
- Mortality
- Morbidity
- Termination

- Expense

The discount rate is required to be an upper-medium grade (low credit risk) fixed-income corporate instrument yield ("single A") that reflects the duration characteristics of the liability. See IG 5.2.3 for further information on the discount rate.

Mortality represents the likelihood of a policyholder dying at various ages. Mortality assumptions comprise an integral component of the calculation of long-duration life and annuity contract liabilities and should be based on estimates of expected mortality. Morbidity represents the likelihood of illness or sickness occurring, and thus morbidity assumptions are incorporated into coverages such as disability, long-term care, and accident and health. ASC 944-40-30-13 notes that expected incidences of disability and claim costs for various types of insurance and other factors, such as occupational class, waiting period, sex, age, and benefit period, should be considered in making morbidity assumptions, as well as the risk of antiselection or adverse selection, which is the risk of having a disproportionately higher number of higher risk policyholders. ASC 944-40-30-12 notes that morbidity assumptions should be based on estimates of expected incidences of disability and claim costs. The expected benefit cash payments for disability claims and not the incurred lump sum amount should be used in the expected benefits.

ASC 944-40-30-14 provides that termination assumptions should be based on estimates of expected terminations and nonforfeiture benefits, using expected termination rates and contractual nonforfeiture benefits (e.g., cash value, paid-up insurance value, or extended-term insurance value). Termination rates may vary by plan of insurance, age at issue, year of issue, frequency of premium payment, and other factors. Composite rates may be used, but only if the rates are representative of the entity's actual mix of business.

Claim-related expense assumptions represent the estimated costs to be incurred by the insurer to settle a claim of an in-force policy, considering the possible effect of inflation, and include such costs as termination or settlement costs. These estimates are generally expressed as a percent of premium or per policy, surrender, or claim processed. ASC 944-40-30-15 notes that non-claim related costs, including policy maintenance costs, are excluded from the net premium ratio and expensed as incurred.

Excerpt ASC 944-40-30-15

However, expense assumptions shall not include acquisition costs or any costs that are required to be charged to expense as incurred, such as those relating to investments, general administration, policy maintenance costs, product development, market research, and general overhead (see paragraph 944-720-25-2).

Annual or more frequent updating of insurance assumptions is required, with the impact on the liability recognized on a retrospective catch up basis as a separate component of benefit expense. See IG 5.2.4 for details on the frequency of when the assumptions must be updated in the net premium ratio.

5.2.3 Discount rate assumption

Future cash flows used to estimate the liability for future policy benefits for nonparticipating traditional insurance contracts and limited-payment contracts must be discounted using an upper-medium grade (low credit risk) fixed-income instrument yield (interpreted as a "single A" interest

yield) that reflects the duration characteristics of the contracts. The discount rate is required to be updated at each reporting date, with the effect of the discount rate changes on the liability recognized in OCI. The contract inception date discount rate is locked in for benefit expense purposes. See IG 5.2.3.1 for additional details.

The discount rate selection should maximize the use of current market observable inputs. The FASB chose the "single A" interest yield as being an objective standardized representation of a liability yield that reflects the characteristics of the liability.

An entity should not substitute its own estimates for observable market data unless the market data reflects transactions that are not orderly, as defined in the guidance on fair value measurement (ASC 820). For points on the yield curve with no or limited market observable data, an entity should use an estimate consistent with existing guidance on fair value measurements.

Question IG 5-1 addresses how to determine the upper-medium grade yield. Question IG 5-2 addresses whether adjustment can be made to the published yield. Question IG 5-3 addresses yield estimates beyond the observable period. Question IG 5-4 addresses non-US grade assessments. Question IG 5-5 addresses when foreign jurisdictions may not have an active market for single A rated securities. Question IG 5-6 addresses the development of a yield curve for a cohort of policies originated over a period of time. Question IG 5-7 addresses the application of different discount rates to individual contracts within a cohort.

Question IG 5-1

How is the upper-medium grade (low credit risk) fixed-income instrument yield determined?

PwC response

When available, observable market data should be used. For example, banks and rating agencies publish rates for corporate fixed-income debt instruments in various rating categories, one of which is characterized as the "upper-medium grade," which corresponds to what is commonly referred to as a "single A" rating. Although these ratings are available for various classes of instruments (e.g., public debt, private placements, municipal debt, asset-backed securities), we believe the FASB's intention is that the upper-medium grade rate be that of a public corporate debt security.

The concept of using a standardized rate in calculating a specific class of liability is consistent with the accounting for pension obligations, which requires discounting using a high-quality fixed-income yield. Therefore, although the yield required for insurance liabilities is upper-medium grade rather than the high-quality rate required for pensions, entities can use similar principles in developing the yield curve. For example, when determining an upper-medium grade yield from an available rating agency, considerations should include assessing whether they incorporate appropriate bonds and bond pricing, effectively match the expected cash flow stream, and incorporate reasonable assumptions about reinvestment of excess bond cash flows and yields for bond maturities in years when no bonds exist (e.g., beyond 30 years).

Question IG 5-2

May an entity adjust the single A yield if it believes the cash flows in its contracts differ in certain respects from a typical single A corporate credit. For example, if the insurer believes the cash flows in its contracts are less liquid than those of a single A-rated public debt of a non-insurance corporate entity, can the yield be adjusted?

PwC response

No. The FASB's intention in requiring the use of an upper-medium grade (low credit risk) fixed-income instrument yield is to promote consistency and comparability between entities as well as to make it operationally easier for entities to apply. Therefore, the only adjustment from a single A-rated corporate debt instrument that would be permitted would be to adjust for differences in duration. The rate is a prescribed rate, unlike the discount rate required by other insurance models, such as IFRS 17, *Insurance Contracts*, under which a debt instrument yield can be the starting point to which further adjustments are made.

Question IG 5-3

An entity has contracts with cash flows expected to occur over the next 70 years. How would an entity develop a single A interest yield for points beyond the observable period?

PwC response

For points on the yield curve for which there is limited or no observable market data (e.g., when cash flows are expected to occur beyond the date when observable single A corporate rates are available), an entity should use estimates determined using techniques consistent with those that would be used for level 3 estimates of fair value under ASC 820. Under that guidance, points on the yield curve may need to be derived through extrapolation or interpolation consistent with what a market participant would use.

Question IG 5-4

What is a single A rate in a non-US territory, such as Japan or Brazil?

PwC response

We believe the FASB's intention is the rate used would be equivalent to a single A interest yield (low credit risk) from a global rating agency for a corporate bond issued in the same currency in which the insurance contract is written.

Question IG 5-5

In foreign economies without an active market of public single A rated securities, how should an upper-medium grade (low credit risk) fixed-income instrument yield be determined?

PwC response

ASC 944-40-30-9 requires the liability for future policy benefits to be discounted using an upper-medium grade (low credit risk) fixed-income instrument yield (interpreted as a single A interest yield for corporate bonds) that reflects the duration characteristics of the contracts/cohorts. In situations when there is not an active market of public single A rated securities in a foreign jurisdiction, insurance entities should estimate a single A rate consistent with existing guidance on fair value measurement in ASC 820 and by maximizing observable data (as noted in ASC 944-40-15-13E). For example, if the foreign jurisdiction has government bonds that are rated above or below single A, it may be possible to derive a hypothetical single A rate corporate bond yield using the sovereign yield as an input to the curve and adjusting it (positive or negative adjustment) as appropriate.

Question IG 5-6

Cohorts may be established that represent particular contracts that are issued over a particular period. For example, a cohort may be defined to be certain term life insurance policies that originate during a particular calendar quarter. How should the curve be developed for this cohort given that interest rates will change over the quarter? For example, should the rate at the beginning of the quarter, end of the quarter or an average of the quarter be used?

PwC response

The objective of ASC 944-40-35-6A (b)(2) is to employ an interest accretion rate on the liability for future policy benefits that represents "the original discount rate used at contract issue date." ASC 944-40-30-7 permits contracts to be aggregated into cohorts for purposes of measurement, and in so doing, implicitly permits entities to use judgment in developing an aggregate discount rate assumption appropriate at the cohort level. The ultimate rate selected should be representative of the cohort as a whole. For example, a reporting entity may determine that a curve as of a particular date in the quarter may best represent the cohort (e.g., beginning curve, mid period curve, or end of period curve) depending on the pattern of issuance, general trend in interest rates, and market availability. A weighted average of the daily curves could also be used.

It may be inappropriate to use a beginning of the period rate/curve without adjustment if there have been significant changes in the yield curve during the period and a significant portion of policies included in such cohort were issued during the latter half of this period.

Variability in yield curve and timing of issuance of policies may therefore be factors that reporting entities consider in determining the length of a cohort (i.e., how long of a period a cohort will cover).

If a cohort spans multiple reporting periods, for instance an annual cohort spanning quarters, a weighted average rate (or weighted average spot or forward curve, if a curve is used) could be developed and updated as each subsequent quarter's activity is added until the annual period is closed. If done appropriately, the changes will be weighted by the new cash flows each quarter and be the approximate equivalent to locking each quarter. The disclosure of the weighted average rate will change each quarter as new insurance contracts are added to the cohort and the interest environment changes.

Question IG 5-7

May an entity apply different discount rates to individual contracts within a cohort?

PwC response

The objective of ASC 944-40-35-6A (b)(2) is to employ an interest accretion rate on the liability for future policy benefits that represents "the original discount rate used at contract issue date." Although in many instances, entities may decide that use of an aggregate rate or curve for the cohort is appropriate (as illustrated in Question IG 5-6), in other instances, they may decide that it is not. For example, entities may write certain types of products for which large premium payments are received at inception on interest sensitively-priced products, such as pension risk transfer business. For these products, entities may decide that measuring the liability at the cohort level using discount rates appropriate for each contract within the cohort better meets the objective set out in ASC 944-40-35-6A (b)(2). We believe this approach and the rationale have merit. However, there continues to be dialogue on this issue in the insurance sector, with some interpreting the guidance as requiring a single curve or rate for a cohort.

Under this approach, a single net premium ratio would be determined for the cohort and would be subject to the 100% net premium ratio cap. The numerator would be the present value of benefits and the denominator would be the present value of premiums for the entire cohort, with each contract's cash flows discounted using the yield curve or rate applicable for the issue date of each contract within the cohort. Similarly, when calculating benefit expense for each period, the ending liability would be calculated from the present value of benefits and present value of net premiums with each contract's cash flows discounted using the yield curve or rate applicable for the issue date of each contract within the cohort.

5.2.3.1 *Impact of discounting in the income statement and OCI*

The liability for future policy benefits involves two separate present value of cash flows calculations. A locked-in discount rate is used for the purposes of generating the liability for future policy benefits for purposes of income statement interest accretion and updating the net premium ratio, while the liability for future policy benefits is remeasured to reflect current single A yields for purposes of balance sheet measurement, with the corresponding change recognized through other comprehensive income.

Locked-in discount rate – income statement interest accretion and updating the net premium ratio

When a contract (or cohort) is first issued, a net premium ratio is calculated that represents the present value of benefits and related claims expense divided by the present value of gross premiums. The discount rate used to derive the net premium ratio is representative of a single A yield curve at contract (or cohort, if applicable) issuance date. This present valuing calculation incorporates the time value of money concept into the determination of the contract margin (i.e., the difference between future premiums less benefits and claims expense) to be recognized over time. The cumulative income statement interest accretion at contract maturity will be equal to the difference in the net premiums and benefits on a discounted and undiscounted basis. Each period, the net premium ratio will be updated using new policyholder assumptions, but the discount rate/curve will be the locked-in rate, as described in ASC 944-40-35-6A.

Excerpt from ASC 944-40-35-6A (b)(2)

The interest accretion rate shall remain the original discount rate used at contract issue date.

Several approaches can be applied to calculate this accretion to the income statement over time. See IG 5.2.3.2 for further details.

Remeasurement of the liability for future policy benefits due to changes in discount rates recognized in OCI

A remeasurement of the liability for future policy benefits is required each period using the current single A discount curve. Updated future benefits and related claim expense cash flows and the updated future net premiums (using the revised net premium ratio) are discounted to the current reporting date using current discount rates (i.e., not the locked-in income statement interest accretion rate determined upon issuance of the contract, but rather the period end single A discount rate curve). The difference between the updated liability measured using the locked-in discount rate curve and the liability measured at the current discount rate curve is presented in accumulated other comprehensive income (AOCI), and the change in AOCI for the period is presented in OCI and not as an expense of the period. The liability for future policy benefits is required to be remeasured each reporting period using the current discount rate curve, even if the net premium ratio is not recalculated in the period.

Question IG 5-8 addresses the interest rate to use to discount cash flows.

Question IG 5-8

In discounting cash flows, does the guidance require the locking in of a yield curve or an equivalent level rate?

For purposes of calculating the balance sheet remeasurement and related OCI adjustment, should one apply a consistent methodology?

PwC response

The guidance does not specify whether an insurer should lock in a yield curve (i.e., use a different rate for each cash flow based upon the curve) or use an equivalent level rate that reflects the duration-specific spot rates from each point on the yield curve. At contract inception, a spot rate yield curve should be used to reflect the expected timing of the cash flows. A different rate on the curve would be used to discount cash flows expected to occur at each point on the yield curve.

The results of using the yield curve could potentially be translated to an equivalent level rate. As the guidance is silent, this equivalent level rate could be locked in and used for discounting all cash flows in future net premium ratio calculations and the income statement benefit expense for the cohort or the curve itself could be locked in with each future year's cash flows using the applicable year rate on the curve.

At each reporting date, a new curve will be needed to remeasure the present value of the cash flows for purposes of calculating the AOCI adjustment (using current rates).

As the objective of discounting is to estimate the time value of money, the estimation techniques selected for a cohort should be used consistently throughout the life of a cohort. Use of a different

technique for subsequent cohorts of the same product may be acceptable if a better estimate is achieved using another technique.

There may be different acceptable techniques for using a locked-in curve in subsequent periods that achieve the objective of isolating changes in market interest rates from the changes in locked-in time value of money. See IG 5.2.3.2 for further details.

5.2.3.2 *Determining the income statement accretion discount rate*

In practice, there are three approaches to determining the income statement accretion discount rate that could be utilized by insurance entities. They are the spot rate, forward rate, and equivalent level rate approaches. Given that the guidance is silent on the specific approach to be used, we believe that each is acceptable given their economic equivalency. If an insurance entity had perfect information, each of these approaches should theoretically produce substantially similar present values at inception of a contract (or cohort). However, the income statement accretion pattern for each subsequent period would be different. Question IG 5-9 discusses whether choosing the spot rate, forward rate, and equivalent level rate approaches must be applied entity wide.

Question IG 5-9

In choosing among the spot, forward and equivalent level rate approaches in determining the discount rate for benefit expense recognition for traditional and limited-payment long-duration contracts, is a reporting entity required to use a similar approach entity wide, or can a different approach be used based upon specific cohorts or products (i.e., can you use a spot rate approach for some products or cohorts and a forward or equivalent level rate for others)?

PwC response

The same approach is not required entity wide. However, we generally expect that the same approach will be used for groups of contracts (cohorts) with similar contract terms and characteristics. A reporting entity may use different approaches when, for example, the timing of cash flows varies between different products or different contracts (e.g., single pay premium versus installment premium life insurance contracts). Once an approach is selected, it should be applied consistently throughout the life of a cohort. Use of a different technique for subsequent cohorts of the same product may be acceptable if a better estimate is achieved using another technique.

Spot rate approach

Under a spot rate approach, each future cash flow used to calculate the net premium ratio is considered akin to a zero-coupon single A rated bond. As a result, each cash flow should be discounted at the rate on the spot rate curve equal to its respective expected payment date.

Under this approach, a spot interest rate curve would be constructed based on a zero-coupon single A corporate bond rate for each duration-specific cash flow, maximizing the use of market observable information. Since corporate bonds typically are not zero coupon instruments, but instead bear a coupon interest rate, the zero-coupon single A corporate bond rate for each duration-specific cash flow would first need to be derived from corporate interest bearing single A corporate bond rates. Once the spot rate curve is derived, each distinct future cash flow would be discounted at the rate specific to its

duration point on the spot curve. As a result, each cash flow would be discounted using an individual, duration-specific spot discount rate for single A rated zero coupon bonds.

Forward rate approach

Under a forward rate approach, each future cash flow is considered to be represented by different rates for each period as if a zero coupon bond is being reinvested each period until its maturity. This approach acknowledges that market participants would be indifferent to purchasing (a) a zero coupon bond with a maturity that matches the future cash flow (i.e., the spot rate approach) or (b) a bond with a shorter term than the future cash flow and reinvesting it at today's view of future rates. A forward curve represents a yield to maturity that would be demanded to purchase a zero coupon bond at some point in the future (for example, a cash flow in year 2 could be discounted at the 1 year spot rate for year 1 and for year 2 at the 1 year forward rate). The year 2 forward rate represents the rate at inception at which a market participant would expect to reinvest at the end of year 1 for a bond maturing in year 2 (i.e., the rate that the market would demand today for a one year bond issued one year from now).

Under the forward rate approach, the interest rate curve could be derived based on the spot yield curve. Each cash flow would be discounted at each period's distinct forward rate on the curve. For example, a cash flow being discounted from year 3 would be discounted at a different rate for year 3, year 2, and year 1, whereas the spot rate approach would discount the cash flow expected at the end of year 3 back to inception using the 3-year spot rate.

Equivalent level rate approach (single rate approach)

Under an equivalent level rate approach, the single equivalent level rate would be determined that reflects the duration-specific spot rates from each point on the yield curve at policy inception. This approach determines a single effective yield considering the timing and amounts of the cash flows using the results of the spot curve approach. This single rate would be utilized for each cash flow regardless of changes in expected cash flow timing or amount in future cohort liability calculations. The single effective yield is determined by solving for the discount rate that produces the same net premium ratio as what would be produced if a curve were utilized (to avoid an immediate OCI impact). Note that solving for the same net premium ratio may result in different present values of net premiums and benefits than would be produced if a curve were utilized.

Each of the three approaches will begin with developing a yield curve for a single A rated corporate bond. Example IG 5-2 illustrates the economic concepts of using each of the three approaches for the purpose of calculating income statement interest accretion.

EXAMPLE IG 5-2

Illustration of different approaches for income statement accretion discount rates

Insurance Company has two cash flows. The first is a $1,000 cash outflow expected to occur at the end of year 2 and the second is a $1,000 cash outflow expected to occur at the end of year 3.

The yield curves for zero-coupon single A rated corporate bonds for years one to three are as follows:

Zero coupon curves	Year 1	Year 2	Year 3
Spot	1%	2%	3%
Forward (derived)	1%	3.01%	5.03%

The forward rates were derived from the spot rates. For example, the year 2 forward rate was determined based on the rate a zero coupon bond maturing after the initial year 1 period (which earned 1% in year 1) would need to earn in year 2 in order to get an overall 2% yield (the year 2 spot rate) over a two-year period. The year 3 forward rate was determined based on the rate a zero coupon bond maturing after the initial year 1 period (which earned 1%) and then reinvested at 3.01% in year 2 would need to earn in year 3 in order to get to an overall yield of 3% (the 3-year spot rate) over a 3-year period.

How would Insurance Company calculate each of the acceptable approaches (i.e., spot rate, forward rate and equivalent level rate) for the purposes of income statement interest accretion?

Analysis

As illustrated in the following tables, each of the approaches results in the same present value at inception ($961.17+915.14 = $1,876.31). Additionally, each one results in the same amount of total interest accretion ($123.69), although the annual amount varies. However, the amount of accretion each period can vary considerably amongst these approaches. This example illustrates the economic concepts of each approach rather than the actual net premium ratio calculation.

Spot rate approach

	Cash flow at end of year 2	**Cash flow at end of year 3**	**Annual interest accretion**
Present value at issuance	$961.17 [1]	$915.14 [2]	
End of year 1	980.39	942.59	$46.67 [3]
End of year 2	1,000.00	970.87	47.89
End of year 3		1,000.00	29.13

[1] Calculated by discounting the cash flow at the end of the year 2 based on the 2-year spot rate of 2% for 2 years ($1,000/(1.02)^2)

[2] Calculated by discounting the cash flow at the end of year 3 based on the 3-year spot rate of 3% for 3 years ($1,000/(1.03)^3)

[3] Represents the interest accretion resulting from applying the respective spot rate to each cash flow for the period (($961.17*2%) + ($915.14*3%))

Forward rate approach

	Cash flow at end of year 2	Cash flow at end of year 3	Annual interest accretion
Present value at issuance	$961.17 [4]	$915.14 [5]	
End of year 1	970.78	924.29	$18.76 [6]
End of year 2	1,000.00	952.11	57.04 [7]
End of year 3		1,000.00	47.89 [8]

[4] Calculated by discounting the cash flow at the end of year 2 to the end of year 1 using the 2-year forward rate of 3.01% and then discounting that total to issuance using the 1% forward rate (($1,000/1.0301)/1.01)

[5] Calculated by discounting the cash flow at the end of year 3 to the end of year 2 using the 3-year forward rate of 5.03%, and then discounting the total to the end of year 1 using the 2-year forward rate of 3.01%, and then discounting the total to issuance using the 1% forward rate ((($1,000/1.0503)/1.0301)/1.01)

[6] Represents the interest accretion resulting from applying the forward rate to each cash flow for the period (($961.17*1%) + ($915.14*1%))

[7] Represents the interest accretion resulting from applying the forward rate to each cash flow for the period. In year 2, the forward rate used for accretion would be 3.01%. Year 2 interest is ($970.78*3.01%) + ($924.29*3.01%)

[8] Represents the interest accretion resulting from applying the forward rate to each cash flow for the period. In year 3, the forward rate used for accretion would be 5.03%. Year 3 interest is ($952.11*5.03%)

Equivalent level rate approach

	Cash flow at end of year 2	Cash flow at end of year 3	Annual interest accretion
Present value at issuance	$ 961.17 [9]	$ 915.14 [10]	
End of year 1			$ 48.59 [11]
End of year 2	1,000.00		49.85
End of year 3		1,000.00	25.25

[9] Calculated by discounting the cash flow at the end of the year 2 based on the 2-year spot rate of 2% for 2 years ($1,000/$(1.02)^2$)

[10] Calculated by discounting the cash flow at the end of year 3 based on the 3-year spot rate of 3% for 3 years ($1,000/$(1.03)^3$)

[11] Represents the interest accretion resulting from discounting each cash flow for the period at the equivalent level rate based upon the spot curve. This rate was determined by calculating the internal rate of return for a bond with an inflow of $1,876.31 (the sum of the present values of each cash flow at issuance, ($961.17 + $915.14)) and an outflow of $1,000 at the end of year 2 and year 3. This rate is 2.59%. The calculation of the interest accretion for year 1 is ($961.17+$915.14)*2.59%. This is a simplified example. As noted in IG 5.2.3.2, the equivalent level rate for the liability for future policy benefits is determined by solving for the discount rate that produces the same net premium ratio as would be produced if a curve were utilized.

When subsequently recalculating the net premium ratio and the liability for future policy benefits under the spot rate approach, the cash flows in years 2 and 3 should continue to be discounted at the same rate utilized at inception (i.e., 2% for year 2 and 3% for year 3 cash flow). Insurance Company

should not move along/walk up/walk down the curve when calculating interest accretion (i.e., it should not discount the $1,000 cash flow at the end of year 2 at 1% (the 1-year zero coupon single A bond rate) given this cash flow is now only one year away). The zero-coupon yield curve applies a blended yield to maturity for each cash flow based upon a single A bond rate. Adjusting this rate to move along/walk down the curve would result in amounts that run counter to amortized cost accounting as it would assume reinvestment at the end of each period at an amount that is different from what has been accrued.

For example, the present value of the year 2 cash flow at inception was $961.17. At the end of year 1, this cash flow accreted by 2% based on the 2-year curve to $980.39. If at the end of year 1, the cash flow at the end of year 2 was discounted based on the 1% 1-year zero coupon rate, the present value of the $1,000 would be $990.10. As a result, the present value would not equal what had been accreted - a nonsensical result.

Alternatively, if Insurance Company had used the forward rate approach, it would accrete the present value amount of $961.17 (representing the present value of the $1,000 cash flow payable at the end of year 2) by 1% in the first year, and by 3.01% in the second year. Similarly, it would accrete the present value of the $915.14 (representing the present value of the $1,000 cash flow payable at the end of year 3) by 1% in the first year, by 3.01% in the second year, and by 5.03% in the third year.

Some might refer to this as "walking along" or "moving up the curve." However, as noted in the spot rate approach, an insurance entity would not "move along/walk down the curve" as time goes on (i.e., at the end of year 1, an entity would not use the 2-year forward rate of 3.01% in place of the 3-year forward rate of 5.03% to discount the $1,000 payable in two years). The forward rate approach already takes into account market expectations of reinvestment at inception rates and market charges for the risk inherent in long term commitments. The same anomaly described above under the spot rate approach would also result if an entity walked down the curve.

Question IG 5-10 addresses the approach to reflecting current discount rates in the liability measurement.

Question IG 5-10

Which discounting approach should be used in the remeasurement of the liability for future policy benefits to reflect current discount rates and the corresponding amount to be recognized in OCI?

PwC response

In deriving the remeasurement of the liability for future policy benefits each period, a new interest rate yield curve representing yields at period end will need to be compiled to remeasure the cash flows for purposes of calculating the AOCI adjustment (using current rates). Such yield curve could be either the single A corporate bond zero coupon spot curve or forward curve. The method used to derive the discount rate for balance sheet remeasurement purposes should be consistent with the method used for interest accretion purposes.

While some insurance entities may want to discount the cash flows for balance sheet remeasurement purposes using an equivalent level rate approach, which mechanically achieves the same result as using a curve, we do not believe there is a practical benefit. This is because the equivalent level rate derived will change each period as the duration of the cash flow changes, and thus the equivalent level

rate at the balance sheet date would need to be derived using an updated curve anyway. The measurement of the liability will be based on the projected cash flows and the curve at the measurement date.

5.2.3.3 *Discount rate on claims liabilities*

In certain product lines, such as disability and long-term care, claim payments may have a "long tail" (i.e., the payout of claims may be expected to occur over a number of years). Claim payments also exist for other traditional long-duration insurance contracts, such as life insurance, but the time period between the incurral and payment of a claim is typically short and results only from lags in reporting and processing of the claim. (Once such a claim is incurred, the benefit is immediately payable and does not depend on any further contingencies.) Based on established practice prior to ASU 2018-12, some entities implicitly think of the long-duration liability as being comprised of cash flows relating to potential future claims (the future benefits component of the liability) as well as cash flows relating to claims that have already been incurred (the claim liability component).

ASC 944-40-30-9 requires actual historical benefits to be included in the updated net premium ratio and discounted using the single A rate at contract (or cohort) inception, implicitly requiring that the claim liability amounts, from which the actual historical benefits will be derived, also be discounted at the inception single A rate. As a result, under the post ASU 2018-12 ASC 944-40 requirements, the "present value of estimated future benefits to be paid to or on behalf of policyholders and certain related expenses" referred to in ASC 944-40-25-8 represent all payments under the contract, including future expected claims and claims for which the disability, morbidity, or other insurance event has occurred but for which claims have not yet been paid. This obviates the need for a separate claim liability measurement. The total liability for measurement purposes includes future benefits, claim liabilities, claims in the course of settlement liabilities, as well as liabilities for incurred but not reported claims and has the same measurement whether presented in total or in components.

Under ASU 2018-12, based on the above changes to the measurement model, entities may present a single liability for future benefits in the statement of financial position. Alternatively, entities may continue their existing practice of presenting a claim liability separate from the future policy benefits liability in the statement of financial position or note disclosures to the extent they believe financial statement users would benefit from this separate presentation. See the claim liability guidance in the AICPA Life and Health Insurance Entities Audit and Accounting Guide, Appendix G.

5.2.4 *Updating assumptions — liability for future policy benefits*

All assumptions (except for claim-related expense assumptions) utilized in the calculation of the liability for future benefits, including mortality, morbidity, and terminations, are required to be reviewed (and updated, as necessary) on an annual basis (at the same time each year by product or by cohort) or more frequently if evidence suggests that assumptions should be revised. To ease the operational burden of allocating and updating claim-related expense assumptions on a periodic basis, insurance entities can make an entity-wide accounting policy election to lock-in these expense assumptions.

A revised net premium ratio is calculated using historical experience and the new assumptions for the future, as outlined in Figure IG 5-2. The revised net premium ratio is calculated as of contract inception, using the discount rate at inception.

Figure IG 5-2
Formula for the revised net premium ratio

$$\text{Revised net premium ratio} = \frac{\text{Present value of actual historical benefits and related claim expenses + present value of future benefits and related claims expenses}}{\text{Present value of actual gross premiums + present value of updated future gross premiums}}$$

The revised net premium ratio is used to update the liability for future policy benefits as of the beginning of the current reporting period, which is then compared to the liability for future policy benefits calculated as of the beginning of the current reporting period using the previous period's cash flow assumptions.

For traditional insurance contracts, the difference between the updated and previous liabilities is the "remeasurement gain/loss" (cumulative catch-up adjustment), which is presented as a separate line item (or parenthetically) in the current period statement of operations. See IG 5.3 for additional considerations for limited-payment contracts.

The revised net premium ratio applied as of the beginning of the current reporting period is also used to calculate the current period benefit expense based on current premium revenue. In subsequent periods, the revised net premium ratio will be used to accrue the liability for future policy benefits, absent future changes in the cash flow assumptions.

Question IG 5-11 addresses the meaning of the phrase "beginning of the current reporting period" as it relates to interim reporting.

Question IG 5-11

What is meant by "beginning of the current reporting period" for purposes of the remeasurement of the liability for future policy benefits for entities that report on an interim as well as an annual basis (e.g., SEC registrants with interim reporting)?

PwC response

In determining the remeasurement gain or loss to be reported when the net premium ratio is revised, the updated liability for future policy benefits must be compared to the carrying value before updating "as of the beginning of the current reporting period" (ASC 944-40-35-6A). For SEC registrants that issue interim financial statements, the "beginning of the current reporting period" is the beginning of the reporting period for which the financial reporting close process is being performed. In accordance with ASC 270-10-45-17, there is no restatement of previously reported interim financial information related to a change in an accounting estimate. That is, the remeasurement gain or loss would be calculated for the interim period as of the beginning of the interim period. This concept follows through to the annual financial statements (i.e., the beginning of the reporting period does not change to the beginning of the year in the annual financial statements). As a result, annual and year to date remeasurement gains or losses will be the sum of each interim (e.g., quarter) remeasurement gains or losses. This interpretation is consistent with the views expressed by the FASB staff on their November 2018 webcast, *IN FOCUS: FASB Accounting Standards Update on Insurance* and the guidance in the

AICPA Life and Health Insurance Entities Audit and Accounting Guide, Appendix G. As an example, if the liability for future policy benefits is remeasured in conjunction with the third quarter Form 10-Q filing for a calendar year-end SEC registrant, the remeasurement is calculated as of July 1 for the quarter-to-date financial information. The year-to-date remeasurement would be the sum of the Q1, Q2, and Q3 quarterly remeasurement gains or losses.

Example IG 5-3 illustrates the calculation of the revised net premium ratio for a cohort of policies and the resulting liability of future policy benefits.

EXAMPLE IG 5-3

Calculation of the revised net premium ratio and liability of future policy benefits

Insurance Company has a cohort of traditional life insurance contracts. At the end of Year 6, Insurance Company updated its mortality assumption to reflect unfavorable experience in that year and its effect on estimated cash flows. The net premium ratio was revised from 71.1% to 71.8%. (See Example IG 5-1 for the calculation of the initial net premium ratio.)

At the end of Year 9, Insurance Company reviewed and updated its mortality assumption to reflect the unfavorable experience in that year and an increase in expected mortality in Years 10-20.

Under the retrospective catch up approach required by ASC 944-40-35-6A, actual historical cash flows received (gross premiums) and paid (benefits) are included from contract inception (Years 1-9) along with updated future cash flow assumptions for Years 10-20 to derive the revised net premium ratio. Refer to the following table for the updated cash flow estimate. Discounting of cash flows to derive the net premium ratio uses the original contract issuance discount rate, which for simplicity of illustration, is assumed to be 0%.

Year	Benefits	Gross premiums
1 (historical)	$200.0	$500.0
2 (historical)	208.8	474.5
3 (historical)	216.1	450.3
4 (historical)	222.2	427.3
5 (historical)	227.0	405.4
6 (historical)	276.9	384.6
7 (historical)	280.1	364.7
8 (historical)	282.2	345.8
9 (historical)	283.2	327.8
10	283.4	310.8
11	282.8	294.6

Year	Benefits	Gross premiums
12	281.4	279.2
13	279.3	264.5
14	276.7	250.6
15	273.5	237.4
16	269.9	224.9
17	265.9	213.0
18	261.5	201.8
19	256.8	191.0
20	251.8	180.9
Total	**5,179.5**	**6,329.1**
Present value (0%)	**$5,179.5**	**$6,329.1**

How should the revised net premium ratio be calculated and what journal entries should be recognized in Year 9?

Analysis

The revised net premium ratio of 81.8% would be used to calculate revised net premiums.

Revised net premium ratio		
Present value of total benefits and expenses (for Years 1-20)	(A)	$5,179.5
Present value of total gross premiums (for Years 1-20)	(B)	6,329.1
Net premium ratio (A)/(B)	(C)	81.8%

The remeasurement gain or loss (i.e., the retrospective catch up adjustment to the beginning of the period liability) is a loss in this case of $287.4, which is calculated by comparing the carrying amount of the liability at the beginning of the period ($542.9) with the updated liability calculated using revised cash flow assumptions ($830.3). The discount rate used in these computations is the original (contract issuance) discount rate.

Updated estimate

Year	Benefits	Gross premiums (A)	Net premiums (A*81.8%)
9	$283.2	$327.8	$268.3
10	283.4	310.8	254.3
11	282.8	294.6	241.1
12	281.4	279.2	228.4
13	279.3	264.5	216.5
14	276.7	250.6	205.1
15	273.5	237.4	194.3
16	269.9	224.9	184.1
17	265.9	213.0	174.3
18	261.5	201.8	165.1
19	256.8	191.0	156.3
20	251.8	180.9	148.0
Total	**3,266.2**	**2,976.6**	**2,435.9**
Present value (0%)	**$3,266.2**	**$2,976.6**	**$2,435.9**

Year 9 calculations (beginning of year)

	Prior estimate	Updated estimate	Change
Present value of future benefits (for Years 9-20)	$2,728.1	$3,266.2	$538.1
Less: Present value of future net premiums (for Years 9-20)	2,185.2	2,435.9	250.7
Liability for future policy benefits	**$542.9**	**$830.3**	**$287.4**

The Year 9 ending liability for future policy benefits ($815.4) is computed as the present value of future benefits minus the present value of future net premiums, in this case using the revised amounts for Years 10-20.

Year 9 calculation (end of year)	
Present value of future benefits (for Years 10-20)	$2,983.0
Less: Present value of future net premiums (for Years 10-20)	2,167.6
Liability for future policy benefits	$815.4

The amount of benefit expense for the period is recognized separate from the remeasurement loss. In this example, actual amounts are equal to expected, and therefore benefit expense ($268.3) is equal to gross premiums of $327.8 multiplied by the net premium ratio of 81.8%. The following entries would be recorded for Year 9.

Dr. Cash[1]	$44.6	
Dr. Benefit expense[2]	268.3	
Dr. Liability remeasurement loss	287.4	
Cr. Premium income		$327.8
Cr. Liability for future policy benefits[3]		272.5

[1] Premiums collected of $327.8, less benefits paid of $283.2

[2] Benefits paid of $283.2, less change in reserve of $14.9 using current net premium ratio of 81.8%

[3] Liability remeasurement of $287.4, less current period change in reserve of $14.9

The $272.5 is the sum of the benefit expense ($268.3) and liability remeasurement loss ($287.4) minus benefit payments of $283.2. From a liability perspective, the $272.5 is the difference between the prior estimate and revised estimate of the liability as of the beginning of the year ($287.4) plus the change in the liability for current year activity of $14.9 ($830.3 - $815.4).

5.2.4.1 *Frequency of updating cash flow assumptions and updating for actual experience*

As noted in IG 5.2.4, cash flow assumptions are required to be reviewed (and updated, as necessary) on an annual basis (at the same time each year by product or by cohort) or more frequently in interim reporting if evidence suggests that earlier cash flow assumptions should be revised. The liability for future policy benefits is also required to be updated for actual experience on an annual basis, but is only required to be updated between annual assessments if the cash flow assumptions are updated.

Question IG 5-12 discusses whether the net premium ratio can be updated more frequently. Question IG 5-13 addresses whether all assumptions need to be updated when revising cash flow assumptions outside of the annual process. Question IG 5-14 addresses whether you need to update the insurance in force when revising the net premium ratio.

Question IG 5-12

May an insurer update the net premium ratio more frequently than annually?

PwC response

The FASB's intent in requiring an annual review (with more frequent updating if evidence suggests the need) was to ease the administrative burden of having to perform frequent revisions. However, an entity is not prohibited from updating the net premium ratio cash flows more frequently in the absence of a trigger. For example, some entities may have the capability to calculate the net premium ratio on a quarterly basis, and may even find it operationally easier and less costly than developing and monitoring triggers for reassessment. Updating the net premium ratio more frequently than annually for actual cash flow changes and changes to insurance in force will result in a better matching of experience variances in the periods in which they occur.

Whenever an entity performs an update, the entity should update all cash flow components, including actual cash flows, updated insurance in force, and potential future cash flow assumptions to produce a revised net premium ratio that uses the best information available at the measurement date. That is, an entity cannot choose to simply update the historical cash flows and the insurance in force. It should consider all information available in the interim period and have a reasonable basis to conclude that all applicable assumptions are still the entity's best estimate, even though more detailed experience studies and a review of future assumptions may be scheduled for later in the year. Similarly, ASC 944-40-35-6 requires updating for actual experience whenever cash flow assumptions are changed.

Question IG 5-13

When updating cash flow assumptions in the net premium ratio calculation outside of the annual process, should all assumptions be assessed or can one assumption be updated without reviewing others? Similarly, when updating actual historical benefit and premium cash flows in the net premium ratio more frequently than annually, should remaining expected future benefit and premium cash flows also be assessed?

PwC response

Yes. All assumptions should be assessed. Whenever an insurance entity performs an update (either annually or more frequently), the entity should update all cash flow components (consisting of actual historical cash flows, updated insurance in force, and future cash flow assumptions) to produce a revised net premium ratio and revised liability for future policy benefits that uses the best information available at the measurement date. That is, an insurance entity cannot choose to simply update the historical cash flows and the insurance in force without considering the need to review its future projections, even though more detailed experience studies and detailed review of future assumptions may be scheduled for later in the year. Similarly, ASC 944-40-35-6 requires updating for actual experience whenever cash flow assumptions are changed. Additionally, when a cash flow assumption is updated for one cohort, consideration should be given to whether other cohorts require an update, including those normally subject to review at a different time of year.

This interpretation is consistent with the views expressed by the FASB staff on their November 2018 webcast, *IN FOCUS: FASB Accounting Standards Update on Insurance,* in which they stated that if an insurance entity concludes that one assumption needs to be updated or actual cash flows must be adjusted, the entity is unlocking the net premium ratio and needs to revalidate that all other

assumptions are still appropriate. It is also consistent with the AICPA Life and Health Insurance Entities Audit and Accounting Guide, Appendix G.

Question IG 5-14

Assuming a reporting entity has determined that an update to the net premium ratio for the interim period is unnecessary (i.e., there is no evidence to suggest that cash flow assumptions should be revised under ASC 944-40-35-5 and ASC 944-40-35-6), does the guidance require an entity to update the insurance in force at the interim date?

PwC response

This fact pattern assumes that a reporting entity has determined that experience to date with the cash flow components (consisting of actual historical cash flows, updated insurance in force, and future cash flow assumptions) does not suggest a need to revise the net premium ratio for the interim period. That is, calculating the liability for future policy benefits using updated cash flow components would not result in a significant change from keeping the existing cash flow components.

Based on that determination, and the objective of reporting the best estimate of the liability for future policy benefits, an entity would not be prohibited from updating the actual insurance in force in a period in which it had not been required to update the net premium ratio based on actual experience, as it will result in a measurement of the liability that more closely approximates the measurement if all three cash flow components had been updated. It would therefore be assumed to not result in a significant impact to the liability for future policy benefits.

5.2.4.2 *Updating the discount rate - liability for future policy benefits*

When calculating the revised net premium ratio, the updated cash flows are discounted using the original contract issue date discount rate (See IG 5.2.3.1). The revised net premium ratio will be used to measure benefit expense based on recognized premium revenue in the period.

A remeasurement of the liability is also required using the current discount rate. The same updated cash flows are discounted to the current reporting date using the current liability discount rate. The difference between the liability measured using the locked-in discount rate and the liability measured at the current rate is reflected in AOCI, and the change for the period is presented in OCI and not as an expense of the period. The remeasurement of the liability for future policy benefits using the current discount rate is required each reporting period even if the net premium ratio is not recalculated in the period. Interest is accreted to the statement of operations using the original discount rate on the contract issue date. As the disabled claim liability is considered part of the liability for future benefits, the impact of remeasuring at current rates will also be reflected in AOCI.

Example IG 5-4 illustrates the calculation and impact of remeasuring the liability for future policy benefits at the current discount rate.

EXAMPLE IG 5-4

Remeasurement of the liability for future policy benefits at the current discount rate

Insurance Company has a locked-in (original issue date) discount rate of 3% and the current rate at the subsequent balance sheet date is 3.2%.

What is the balance sheet remeasurement adjustment for the liability for future policy benefits?

Analysis

Insurance Company would remeasure the liability for future policy benefits as follows:

Present value of updated future benefits and related claim expenses @ 3%	$1,200
Less: Present value of updated future net premiums @ 3%	(1,050)
Liability for future policy benefits @ 3%	$150 (A)
Present value of updated future benefits and related claim expenses @ 3.2%	$1,170
Less: Present value of updated future net premiums @ 3.2%	(1,030)
Liability for future policy benefits @ 3.2%	$140 (B)
Difference (A) - (B)	$10

Insurance Company A would record the following entry to recognize the remeasurement of the liability for future policy benefits. Company A has reversed the previous period AOCI adjustment, so the end of the period adjustment would be as follows:

Dr. Liability for future policy benefits	$10	
Cr. AOCI		$10

Updating the discount rate through OCI will often mitigate the volatility in stockholders' equity if the insurance entity invests in available-for-sale debt securities to fund the group of contracts at the inception of the contract. For example, when interest rates decline after contract issuance, there would be a charge to OCI for the related change in the liability for future policy benefits. This charge would potentially offset the OCI impact from the available-for-sale debt securities funding the product. Decreases in interest rates do not result in loss recognition through the income statement.

In certain increasing interest rate environments, a change in the interest rates could result in the remeasurement producing a liability for future policy benefits that is negative (present value of future benefits less present value of net premiums). However, ASC 944-40-35-7B states that the liability for future policy benefits on a cohort basis cannot be negative. This guidance applies both for balance sheet remeasurement and for measurement of the liability at the locked in discount rate.

ASC 944-40-35-7B

In no event shall the liability for future policy benefits balance be less than zero at the level of aggregation at which the reserves are calculated.

5.2.5 *Loss contracts – future policy benefits*

As cash flow assumptions are required to be updated regularly and the net premium ratio is capped at 100% (i.e., net premiums cannot exceed gross premiums), a premium deficiency test is not required for nonparticipating traditional insurance and limited-payment contracts. Expected benefits and claim-related costs in excess of premiums are expensed immediately. As the liability assumptions are updated at least annually, if conditions improve whereby the contracts are no longer expected to have net premiums in excess of gross premiums, the improvement would be captured in the remeasurement process and reflected in earnings in the period of improvement.

5.2.6 *Level of aggregation – future policy benefits*

ASC 944-40-30-7 prescribes that a group cannot contain contracts with different issue years, but does not provide any more specific guidance on grouping.

Excerpt ASC 944-40-30-7

In determining the level of aggregation at which reserves are calculated, an insurance entity shall not group contracts together from different issue years but shall group contracts into quarterly or annual groups.

Factors to consider in grouping contracts within issue years include the type of insurance benefit, the type of insurance risk, and how the contract is priced. The retrospective calculation for a cohort requires using historical information for contracts that have terminated as well as those in force.

Question IG 5-15 addresses grouping different products issued within the same year. Question IG 5-16 addresses whether there can be different cohorts for two contracts issued in the same year. Question IG 5-17 addresses whether the grouping can be based on something other than the year.

Question IG 5-15

Can an insurance entity group different products issued within the same year (e.g., a whole life contract and a term insurance contract, or a disability contract and a long-term care contract) for purposes of calculating the net premium ratio and the liability for future policy benefits?

PwC response

It is expected that these each grouping would be within a particular product line or a level below the product level. Grouping of a whole life product with disability or long-term care products usually would not meet this objective.

Question IG 5-16

Can an insurance entity have different cohorts for two term insurance contracts issued within the same quarter (e.g., a 10-year term insurance contract issued to a 20-year old male and 65-year old woman), for purposes of calculating the net premium ratio and the liability for future policy benefits?

PwC response

Potentially. As noted in Question IG 5-15, it is expected that cohort groupings be within a particular product line or a level below the product level. ASC 944-40-30-7 only specifies an upper bound to the cohort groupings, but does not provide more specific guidance. Judgment will have to be applied to determine whether contracts written within the same quarter or year have similar risks and should be within the same cohort. Factors to consider in grouping contracts within issue years include the type of insurance benefit, the type of insurance risk, and how the contract is priced. An insurance entity may argue that the two different term products were priced differently or that some aspect of their expected performance or risks warrants separate measurement.

Question IG 5-17

Can an annual contract grouping for measuring the liability for future policy benefits for nonparticipating traditional and limited-payment contracts be determined on something other than a calendar year basis (e.g., can it be the 12 months ending June 30 if the annual assumption update is done in the second quarter)? Can an insurance entity use different annual periods for different products, geographic locations, or foreign subsidiaries?

PwC response

The new guidance requires that contracts be grouped into quarterly or annual groups and prohibits grouping contracts with different issue years; however, it does not provide any more specific guidance. As a result, there is nothing that prohibits an entity from defining annual cohorts on other than a calendar-year basis, nor is there anything that requires an entity to make the grouping decision on an entity-wide basis.

5.3 Measurement – limited-payment insurance contracts

Limited-payment contracts provide a specified, fixed amount of insurance benefit that extends beyond the period or periods in which premiums are collected (e.g., single pay life insurance contract, five-year pay whole life insurance, single premium life-contingent payout annuity). GAAP guidance requires that the liability for future policy benefits attributable to limited-payment contracts be calculated consistent with the accounting for nonparticipating long-duration contracts if the terms of the contract are fixed and determinable. See IG 5.2 for additional information on the measurement of nonparticipating traditional insurance contracts.

Under the accounting for nonparticipating long-duration contracts with premiums received over the entire life of the contract (traditional life insurance), any gross premium received in excess of the net premium is recognized in income when received. However, in the limited-payment model, the collection of premium does not represent the completion of the earnings process, so any gross premium received in excess of net premium must be deferred initially. The deferred revenue amount is

known as the deferred profit liability (DPL). ASC 944-605-35-1A requires the DPL to be amortized in relation to the discounted amount of the insurance in force (for life insurance contracts) or expected future benefit payments (for annuity contracts). As the calculation of the DPL is based on discounted cash flows, interest accrues on the unamortized DPL balance.

The guidance does not specify where to present the DPL and subsequent amortization of the DPL within the balance sheet or income statement. Refer to IG 10.2.1 for further information. The liability for future policy benefits attributable to limited-payment contracts is consistent with the accounting for nonparticipating traditional insurance contracts. Refer to the table in Figure IG 5-3 for additional references to guidance within this guide.

Figure IG 5-3
Guidance on measuring the liability for future policy benefits

Reference	Topic
IG 5.2.1	□ Estimating the liability for future policy benefits
IG 5.2.2	□ Liability assumptions in the net premium ratio
IG 5.2.3	□ Discount rate assumption
IG 5.2.4	□ Updating assumptions in the liability for future policy benefits
IG 5.2.5	□ Loss contracts – future policy benefits
IG 5.2.6	□ Level of aggregation – future policy benefits

5.3.1 Changes to the liability for future policy benefits and DPL

For limited-payment contracts, the updating of cash flow assumptions and resulting retrospective updating of the net premium ratio impacts not only the liability for future policyholder benefits, but also the amount of the DPL. The DPL will also be adjusted on a retrospective catch up basis, contemporaneous with any updating of the liability for future policy benefits.

The remeasurement gain or loss in net income for the current reporting period as a result of updating cash flow assumptions is described in ASC 944-605-35-1C.

Excerpt ASC 944-605-35-1C

a. Cash flow assumptions used to calculate the deferred profit liability at contract issuance shall be updated in subsequent periods using actual historical experience and updated future cash flow assumptions.

b. The recalculated deferred profit liability as of the contract issue date shall be subsequently amortized in accordance with paragraph 944-605-35-1A to derive the revised deferred profit liability estimate as of the beginning of the reporting period.

c. The revised deferred profit liability estimate calculated in (b) shall be compared with the carrying amount of the deferred profit liability as of the beginning of the current reporting period to

determine the change in the estimate adjustment to be recognized in net income of the current reporting period (see paragraph 944-40-45-4).

Insurance entities should complete the following steps in order to reflect the updating of cash flow assumptions within the liability for future policy benefits and DPL for limited-payment contracts in subsequent periods:

- Update cash flow assumptions used to calculate the liability for future benefits and the DPL at contract issuance using actual historical experience and updated future cash flow assumptions (see IG 5.2.4).
    - Updated insurance in force or expected benefit payments are discounted using the original contract issue date discount rate.
- Using the updated DPL as of the contract issue date, recalculate subsequent amortization based on the updated discounted amount of insurance in force (for life insurance) or expected future benefit payments (for annuity contracts) to derive the revised DPL estimate as of the beginning of the current reporting period.
- Compare the revised DPL to the carrying amount of the DPL as of the beginning of the current reporting period to determine the remeasurement gain or loss.

The guidance does not specify the categorization of the remeasurement gain/loss in net income other than requiring presentation separately in net income, either parenthetically or as a separate line item (see IG 10.2.1.1). If an insurance entity chooses to present the remeasurement gain/loss parenthetically, we expect it to be in the same revenue or expense category where DPL amortization is recognized. See IG 10.2.1 for further details on the presentation of DPL amortization.

Interest will accrue on the unamortized DPL at the original contract issue date discount rate.

5.4 Measurement – universal life-type insurance contracts

Universal life-type contracts have charges or provide benefits that are not fixed or guaranteed. A principal component of most universal life-type contracts is an account balance on which interest is credited to policyholders and from which fees are deducted (assessed) for mortality (or other insurance) risk and contract administration.

The revenue recognized on a universal life-type contract consists of mortality (or other insurance) fees and contract administration assessments. Such revenue is generally recognized when due as policy charges and fee income. Unlike traditional insurance contracts, the premiums collected are considered deposits and are not recognized as revenue. The premiums received are part of the policyholder's account balance and recognized on the balance sheet as a liability.

Under ASC 944-40-30-16, the liability for policy benefits for universal life-type contracts is equal to the sum of the following four elements:

- Balance that accrued to the benefit of the policyholder at the balance sheet date (e.g., stated account balance or similar internal explicit or implicit contract value). The accounting method that

measures the liability for policy benefits based on policyholder balances is known as the "retrospective deposit method." See IG 5.4.1.

- Amounts previously assessed against policyholders for services to be performed in the future (i.e., deferred revenue, including front-end or initiation fees). See IG 5.4.3.
- Amounts previously assessed against policyholders that are refundable on contract termination
- Any amounts provided for premium deficiencies. The liability for premium deficiency should be calculated in accordance with the premium deficiency provisions of the accounting for long-duration contracts. See IG 7.3 for further information on initial and subsequent measurement.

The most significant component of a universal life-type contract is the policyholder account balance, as the other elements may not always be present. In addition to the four components of the liability for all universal life-type contracts, ASC 944-40-25-25B requires an "additional liability" for some universal life-type contracts. These liabilities are accrued for contracts or contract features that provide potential benefits in addition to the account balance that accrues to the benefit of the policyholder. See IG 5.4.5.

5.4.1 *Policyholders' account balances and other contract elements*

The account balance is analogous to a deposit placed with a financial institution. It is the accumulated gross amount accruing to the policyholder under the terms and conditions of the policy assuming the contract will continue in force. As described in ASC 944-40-25-14 through ASC 944-40-25-15, the accrued account balance for universal life-type contracts is the sum of:

a) deposits (i.e., premiums) net of withdrawals,

b) plus amounts credited pursuant to the contract,

c) less fees and charges assessed,

d) plus additional interest (i.e., an amount that is required to be accrued under the liability valuation model that has not yet been credited to the contract holder account balance - see IG 5.4.2),

e) plus or minus other adjustments (for example, appreciation or depreciation relating to variable annuity, variable life, and certain group pension participating contracts to the extent not already credited and included in (b) above).

Surrender and other similar charges not assessed against the account balance absent any action by the policyholder (i.e., termination of the contract through surrender) should not be accrued. This includes contracts referred to as market value annuities, which provide for a return of principal plus a fixed rate of return if held to maturity (book value) or a market-adjusted value if surrendered before maturity. See IG 5.4.4 for additional information.

Contracts that have features resulting in more than one potential account balance should base the accrued account balance on the highest contractually-determinable balance that will be available in cash or its equivalent without reduction for future fees and charges expected to be assessed. An

example is a contract that provides a return based on a contractually-referenced pool of real estate assets owned by the insurance entity but also provides for minimum investment return guarantees.

For a contract not accounted for as a derivative that provides a return based on the total return of a referenced pool of assets, the accrued account balance should be based on the fair value of the referenced pool of assets, in accordance with ASC 944-40-25-19.

For certain universal life-type contracts, an explicit account balance will not be reported to the policyholder. However, in many instances, an internally generated explicit account balance or an implicit account balance will be maintained or calculated for each policyholder. Typically, these balances are generated by the insurance entity for purposes of calculating the amount of "excess interest" to be credited to each policy (i.e., there must be a determinable balance against which the "excess interest" crediting rate can be applied).

In the absence of a stated account balance or a similar explicit or implicit contract value, the cash surrender value measured as of the balance sheet date should be accrued. However, in the event it is determined that only the cash surrender value should be accrued, it may be appropriate to reconsider the product classification. Generally, a significant and flexible investment component is incorporated into each universal life-type product, and it is unlikely that a universal life-type policy could provide such a function or service without the maintenance of at least an implicit account balance. See IG 2.4 for more information on the framework for appropriate classification of long-duration insurance contracts.

5.4.2 Sales inducements - universal life-type contracts

Sales inducements (including "Day 1 bonuses," persistency bonuses, and enhanced interest crediting) should be accrued as part of the liability for policy benefits over the period for which the contracts must remain in force for the contract holder to qualify for the inducement or at the crediting date, if earlier, in accordance with ASC 944-40-25-12. See IG 5.4.1.

Guidance in ASC 944-30-25-6 and ASC 944-30-25-7 requires an entity to establish a sales inducement asset for such amounts credited to account balances if certain criteria are met. The sales inducement asset is required to be amortized and recognized as a component of benefit expense using the same methodology and assumptions as DAC. See IG 3.6 and IG 3.6.1 for additional guidance on the recognition of sales inducement assets and subsequent accounting.

An example of additional interest is a persistency bonus that is determined as a percentage of a specified future year's account balance (e.g., 1% of the account balance that exists at the end of year five). ASC 944-40-55-12 requires a persistency bonus to be accrued ratably over the five-year vesting period. Accruing using an interest rate method or at a level amount each period is appropriate. Other methods, such as using estimated gross profits, would not be appropriate as consideration of anticipated surrenders and deaths is prohibited. Separately, a sales inducement asset would be established and amortized as a component of benefit expense on a basis consistent with DAC amortization.

Question IG 5-18, Question IG 5-19, and Question IG 5-20 address accrual of persistency bonuses.

Question IG 5-18

How should the amount of persistency bonus to be accrued over the vesting period be estimated for a persistency bonus that is determined as a percentage of a specific future year's account balance (e.g., 1% of the account balance that exists at the end of year five for a contract that receives a discretionary crediting rate each period?

PwC response

An acceptable approach would be to use the account balance at the end of the current reporting period as an estimate of the future account balance, and multiply that amount by 1% to estimate the persistency bonus to be paid at the end of year five. This amount would be recognized ratably over the five-year period. Cumulative adjustments would be made each period for the impact of changes in the current balance.

Question IG 5-19

How should the liability for a recurring persistency bonus (e.g., crediting a bonus every 5 years) be accrued?

PwC response

Several potential methods could be used. One method would be to accrue each bonus during each separate five-year vesting period.

Another method would be to calculate the total amount of bonus interest that would be paid at contract maturity and recognize the additional interest over the life of the contract using the effective interest rate method. Alternatively, each persistency bonus can be considered separately and individually recognized ratably over the period from inception of the policy to it individual crediting date.

Question IG 5-20

What is the accounting for the accrued additional interest liability upon a policy lapse?

PwC response

The liability is reversed and the forfeited persistency bonus treated as an additional surrender charge.

Question IG 5-21 and Question IG 5-22 address other types of sales inducements.

Question IG 5-21

Assume a product for which a "Day one" bonus is offered upon each deposit, not just the initial premium deposit, and additional deposits are at the policyholder's discretion and not expected to be level. Would the bonus qualify as a capitalizable sales inducement?

PwC response

Yes. Bonuses on discretionary non-level deposits can be considered incremental and thus are potentially eligible for capitalization if all of the ASC 944-30-25-6 criteria are met. On the other hand, if premium deposits were scheduled and required, and if the "Day one" bonus was being offered on each premium deposit, it may be difficult for the company to clearly demonstrate that bonuses on such amounts are incremental.

Question IG 5-22

If "bonus interest" is offered to policyholders as a trade-off with other contract features, e.g., a higher bonus applies if an increased surrender charge schedule is elected, would that bonus be eligible for deferral as a sales inducement?

PwC response

If the crediting is predicated on the features that are elected, the contracts can never be similar, and thus the bonus would not be eligible for deferral.

The sales inducement asset and liability represent contract cash flows and therefore should be included in universal life insurance premium deficiency tests. Refer to IG 7.3 for further information.

5.4.3 *Deferred revenue — universal life-type contracts*

Guidance related to accounting for long-duration contracts in ASC 944-605-25-6 through ASC 944-605-25-7 requires that amounts assessed against the policyholder during a period for services to be provided in future periods should be deferred. Thus, any front-end or initiation fees assessed at the inception of a contract or during the earlier years should be deferred. The recognition of revenue when front-end fees are assessed would be inappropriate as no service has yet been provided. Unearned revenue should be amortized into revenue in the same manner, and using the same assumptions, as are utilized to amortize DAC in accordance with ASC 944-605-35-2. See IG 3.5 for additional information on the amortization of DAC.

ASC 944-605-25-9 through ASC 944-605-25-10 clarify that the unearned revenue liability is separate from any additional liability for death or other insurance benefits that may be required to be established. See IG 5.8 for further information.

Unearned revenue, along with sales inducement assets and liabilities, represent contract cash flows and therefore should be included in universal life insurance premium deficiency tests. See IG 7.3 for further information.

5.4.4 *Surrender charges — universal life-type contracts*

A surrender charge is collected when the relationship between the policyholder and the insurer has been severed at the specific election of the policyholder.

Surrender charges are designed to provide for the recovery of contract origination costs that may not be fully recovered from policy profits if the policy is terminated early or to allow the entity to invest in longer term assets without disintermediation risk (i.e., the risk investments will need to be sold early

when interest rates have risen). Thus, the level of surrender charges assessed against policyholders generally decreases on a sliding scale to zero after a specified period of time. Since the insurance entity cannot assess surrender charges until an event is enacted by the policyholder (e.g., termination of the policy), surrender charges (like other policyholder fees) are recognized as earned when assessed by the insurance entity.

5.4.5 *Additional liabilities — universal life-type contracts*

In addition to the four components of the liability for universal life-type contracts, ASC 944-40-25-25B may require an "additional liability" for some universal life-type contracts. These liabilities are accrued for contracts or contract features that provide potential benefits in addition to the account balance that accrues to the benefit of the policyholder. These contract features protect against a policy lapsing (e.g., no lapse guarantee), offer a return based on the total return of a referenced pool of assets (e.g., indexed crediting rate tied to the S&P 500), or offer guaranteed minimum benefits (e.g., guaranteed minimum death benefit). Insurers must evaluate whether these features meet the criteria of market risk benefits (MRBs), embedded derivatives, or represent additional liabilities for annuitization, death, or other insurance benefits. See IG 2.4 for additional details of the analysis to determine appropriate classification and IG 5.6, IG 5.7, and IG 5.8 for the accounting considerations for MRBs, embedded derivatives, and additional liabilities for annuitization, death, or other insurance benefits, respectively.

5.5 *Measurement – investment contracts*

Investment contracts are those contracts written by an insurer that do not subject the insurer to significant mortality or morbidity risk (e.g., a guaranteed investment contract (GIC)). Certain annuities may qualify as investment contracts (e.g., fixed annuities, fixed (equity) indexed annuities in the accumulation phase). However, the payout phase for a fixed annuity (i.e., the period during which the contract holder is receiving periodic payments) is a separate contract for accounting purposes (a limited-payment contract). See IG 2.4 for additional considerations surrounding long-duration insurance contract classification.

Long-duration insurance contracts that have been classified as investment contracts must be accounted for in a manner consistent with the accounting for interest bearing or other financial instruments in accordance with ASC 944-825-25-1 through ASC 944-825-25-2. The premiums collected are considered deposits and are not recognized as revenue. The premiums are part of the account balance of the policyholder and are recognized on the balance sheet as a liability. Any change in the accrued account balance should be reflected in net income in the period of the change.

The liability for policy benefits is the stated account balance, if applicable. If there is no stated account balance, the liability is recognized as the present value of future payments using the effective yield at inception of the contract.

In accounting for investment contracts in a manner similar to other interest bearing obligations, revenue results from the investment of funds received from the policyholder and from any surrender charges. Expenses are comprised primarily of interest credited to the policyholder's account balance. No provision for future losses (i.e., premium deficiency) is made for investment contracts. In the event that losses are estimated, the losses represent a negative investment spread that should be recognized over the remaining life of the contract, consistent with other industries' treatment of debt instruments.

Investment contracts can have various contract features, including returns based on the total return of a referenced pool of assets (e.g., indexed crediting rate tied to the S&P 500) and guaranteed minimum benefits (e.g., guaranteed minimum withdrawal benefit or GMWB). Insurers must evaluate whether those features meet the criteria of market risk benefits (MRBs), embedded derivatives, or represent additional liabilities for annuitization, death, or other insurance benefits. See IG 2.4 for additional details of the analysis to determine appropriate classification and IG 5.6, IG 5.7, and IG 5.8 for the accounting considerations for MRBs, embedded derivatives, and additional liabilities (annuitization, death, or other insurance benefits), respectively.

5.6 Measurement – market risk benefits

ASC 944-40-25-25C introduces the term "market risk benefits" (MRBs). The market risk benefit is an amount that a policyholder would receive in addition to the account balance upon the occurrence of a specific event or circumstance, such as death, annuitization, or periodic withdrawal. See IG 2.4.5 for further information on the assessment of contract features under the MRB guidance.

Features that meet the definition of MRBs are accounted for at fair value. The portion of the fair value change attributable to a change in the instrument-specific credit risk of the issued contract is recognized in other comprehensive income, while the remainder is recognized in net income. MRB balances and changes in their measurement are separately presented in the statement of financial position and the statement of operations.

MRBs can be present in variable and fixed annuity contracts and in certain life insurance contracts. MRB features in contracts include various guaranteed minimum benefits (GMXBs), such as guaranteed minimum death benefits (GMDBs) and guaranteed minimum income benefits (GMIBs). MRB features also include guaranteed minimum accumulation benefits (GMABs) and guaranteed minimum withdrawal benefits (GMWBs) previously accounted for as embedded derivatives, as well as GMWB for life benefits, for which there was previously diversity in accounting practice. For variable annuity contracts, the host contract will continue to be measured under existing guidance in ASC 944-80-25-3, which requires that a liability be recognized equal to the total of the fair value of the assets held in the separate account for the policyholder.

ASC 944-40-25-25D (b) notes that an MRB does not include the death benefit component of a life insurance contract (i.e., the difference between the account balance and the death benefit amount). However, an MRB may be present in a life insurance contract if it provides for protection from capital market risk for other benefits, for example, a GMAB or GMWB on the account balance component of a variable universal life insurance contract. MRBs may also be present in certain universal life insurance contracts that provide for an option to settle the contract upon surrender or death with an annuity determined using guaranteed fixed interest rates.

5.6.1 Initial measurement of MRBs

ASC 944-40-30-19C through ASC 944-40-30-19D require that market risk benefits be measured at fair value and provide further guidance on initial measurement of the MRB features, incorporating guidance from ASC 815-15, which relates to identifying and measuring embedded derivatives.

ASC 944-40-30-19C

A market risk benefit shall be measured at fair value. Total attributed fees used to calculate the fair value of the market risk benefit shall not be negative or exceed total contract fees and assessments collectible from the contract holder.

ASC 944-40-30-19D

In determining the terms of the market risk benefit, the insurance entity shall consider guidance on determining the terms of an embedded derivative that is required to be accounted for separately under Subtopic 815-15 on embedded derivatives, including the following:

a. Consistent with paragraph 815-15-30-4, if a nonoption valuation approach is used, the terms of the market risk benefit shall be determined in a manner that results in its fair value generally being equal to zero at the inception of the contract.

b. Consistent with paragraph 815-15-30-6, if an option-based valuation approach is used, the terms of the market risk benefit shall not be adjusted to result in the market risk benefit being equal to zero at the inception of the contract.

c. Consistent with paragraph 815-15-25-7, if a contract contains multiple market risk benefits, those market risk benefits shall be bundled together as a single compound market risk benefit.

ASC 944-40-30-19D notes that in determining the terms of the market risk benefit, the guidance on determining the terms of the embedded derivative in ASC 815-15 should be considered. ASC 815-15-30-2 provides guidance on allocating the value of a hybrid instrument between the embedded derivative and the host contract. The embedded derivative is measured on the balance sheet at its fair value at inception, and the carrying amount assigned to the host contract is calculated as the difference between the basis of the combined contract and the fair value of the embedded (the "with and without" method). A similar methodology would apply for measuring the MRB and host insurance or investment contract.

Question IG 5-23 discusses the unit of account for MRB measurement.

Question IG 5-23

What is the unit of account for determining the attributed fee for an MRB? How does it compare to the unit of measurement for fair value under the ASC 820 fair value framework?

PwC response

The unit of account for determining the attributed fee for an MRB is the individual contract. An entity is limited to fees and assessments collectible from "the contract holder," meaning each individual contract holder. In principle, fees and assessments collectible from one contract holder cannot be attributed to another contract.

The unit of account may differ from the unit of measurement. The fair value of an MRB feature may, under ASC 820 fair value guidance, be determined for a group of MRBs (i.e., the group may be the unit of measurement). However, ASC 820 does not change the unit of account prescribed by ASC 944. To the extent components of the fair value of an MRB are measured at a higher level than the individual

contract (e.g., risk margin), that component of the fair value would need to be allocated to the individual contracts in a systematic and rational manner. Additionally, certain insurance assumptions such as mortality rates and lapse rates may be determined based on the average experience of a group of policies. These averages will be applied at the contract level. For example, male attained age mortality assumptions may be set in aggregate but would apply to each policyholder based on their attained age. The attributed fee determined at inception of the contract is then calculated and set at the contract level based on the specific application of assumptions to that contract.

In practice, in determining the attributed fee at contract inception, it may be possible to group homogeneous contracts issued in the same period. For example, homogeneous groups of contracts could be accumulated for each product (such as all variable annuities with guaranteed minimum death benefits), by category of additional benefit (such as a return of premiums, premiums plus interest, or highest anniversary value), by type of fund offered, and for each issue age within these categories. When grouping contracts, entities should consider the likelihood and materiality of any potential misclassification due to insufficient fees of one group being made up with allocation of fees from another group of contracts.

In practice, a common valuation approach for a GMXB feature used to identify cash flows of an MRB in a variable product is the "attributed fee" method. The attributed fee in a GMXB feature is typically determined at contract inception by estimating the fair value of expected future benefits and allocating a portion of the total fees expected to be assessed against the contract holder equal to the fair value of the expected benefits. This results in a zero value for the feature at inception. The fair value of the expected future benefits is typically estimated consistent with capital market valuations of derivatives, using a stochastically-generated set of risk neutral scenarios, as the mean present value of future benefits plus a risk charge. The attributed fee may differ from the fee specified in the contract for the GMXB benefit. ASC 944-40-30-19C provides that the attributed fee cannot exceed the total contract fees and assessments collectible from the contract holder and cannot be less than zero. Assessments collectible from the contract holder typically include explicit rider fees as well as those for administration, mortality, and expense. Investment spread/margin is excluded from the attributed fee determination as these amounts are not collected from contract holders.

Question IG 5-24 discusses the exclusion of other sources of profit from attributed fees for an MRB.

Question IG 5-24

Can mutual fund fees or other fees that are received in conjunction with a contract (but are not directly collectible from the contract holder) typically be considered part of total contract fees and assessments collectible from the contract holder?

PwC response

Generally, no. Fees or assessments collectible under separate contracts that are not directly executed between the insurance entity and the contract holder typically do not qualify as "contract fees and assessments collectible from the contract holder." Examples of fees that do not meet the description include mutual fund fees earned by an affiliate mutual fund provider and "revenue sharing" fees received from third-party mutual funds relating to an insurer's separate account mutual fund investments.

The attributed fee determined at contract inception (equal to the fair value of expected future benefits) is typically converted to an equivalent basis point charge using whatever base is used to determine the amount of the contractual fees. For example, for products where total fees are collected based on account balance, the attributed fee is converted to an equivalent amount of basis points of the account balance. This basis point charge allocation is considered a fixed term of the MRB feature for accounting purposes and does not change over the life of the contract. At subsequent reporting dates, the fair value of the GMXB is determined based on the present value of future benefits to be paid to contract holders minus the present value of the future attributed fees.

A common approach used to identify the cash flows of an MRB in a non-variable product and determine its fair value measurement is the option-based method. Under this approach, the fair value of expected future benefits is determined at contract inception and the host insurance or investment contract would be adjusted by that amount, representing the consideration received for the written option. The adjustment of a non-variable (general account) debt host is effectively a discount on the debt host equal to the option premium. We believe the option approach is not appropriate for a variable account contract as the host separate account liability is required to be valued at an amount equal to the fair value of the related separate account assets without diminution.

For stand-alone MRB contracts (e.g., when an MRB feature in a direct annuity contract is reinsured and there are no other features in the reinsurance contract), there is no attributed fee, only reinsurance premiums. The expected periodic future premiums represent cash inflows and the expected future benefits represent cash outflows in the fair value calculation. Assuming that the contract represents an arms-length transaction between a willing buyer and seller, neither party is expected to have a gain or loss upon entering into the contract.

Example IG 5-5 and Example IG 5-6 illustrate the recognition and measurement of certain market risk benefits.

EXAMPLE IG 5-5

Recognition and measurement of an MRB in a variable annuity

A contract holder deposits $100,000 in a deferred variable annuity with GMAB and GMDB riders that provide that the contract holder's benefit upon the year 5 anniversary date or upon death will be the greater of the account balance or the deposits less withdrawals accumulated at 3% interest compounded annually. The policy terms provide that fees equal to 200 basis points of the account balance will be deducted from the account balance each year. The insurance entity uses the attributed fee method to determine the fair value of the MRB. The insurance entity determines that the fair value of the total benefits for the GMAB and GMDB riders to be paid in excess of the account balance is $7,500 and the estimated total amount of fees is $20,000.

Under the attributed fee method (non-option method), how would the MRB and host contract be recognized and measured?

Analysis

The attributed fees for the compound MRB would be 37.5% (MRB attributed fee of $7,500/ total expected fees of $20,000), or 75 basis points of the annual fees of 200 basis points. These ascribed fees are less than the contractual fee. Going forward, the MRB fair value will be determined as the current fair value of the future excess benefits to be paid minus the current fair value of 75 basis points

of the account balance. The remaining 125 basis points of contractual fees will be considered variable annuity host fees and recognized when deducted.

EXAMPLE IG 5-6

Recognition and measurement of an MRB in an equity indexed annuity

A contract holder deposits $100,000 in an equity indexed annuity with a GMDB rider that provides that the contract holder death benefit be credited an additional 25% of the S&P 500 positive returns beyond those credited to the account balance. At contract inception, the entity determines that the fair value of the benefits to be paid in excess of the account balance is $5,000 and the fair value of the embedded derivative for index crediting is $10,000.

Under the option method, how would the MRB, embedded derivative, and host contract be recognized and measured?

Analysis

In using the option method of identifying the MRB cash flows in determining its fair value, the insurance entity would recognize an MRB liability of $5,000, an embedded derivative of $10,000, and an account balance, less discount, host contract of $85,000. The host discount of $15,000 would be accreted through interest crediting expense over the life of the host contract to $100,000. The MRB and embedded derivative would be revalued each period to fair value.

5.6.2 *Multiple market risk benefit features*

ASC 944-40-30-19D(c) provides guidance on the accounting for multiple market risk benefits within a single long-duration contract.

> ASC 944-40-30-19D(c)
>
> Consistent with paragraph 815-15-25-7, if a contract contains multiple market risk benefits, those market risk benefits shall be bundled together as a single compound market risk benefit.

Accounting for market risk benefits within an insurance contract often becomes more complex when there are multiple MRBs. Each potential MRB should be analyzed separately to determine if it meets the scope criteria.

Once a conclusion is reached that multiple MRB features must be separated from the host contract, the value of the compound MRB is based on one unit of account rather than determining separate fair value measurements for each market risk benefit component and adding them together. A separate unit of account method is inconsistent with ASC 944-40-30-19D(c) and may produce an inappropriate valuation result since multiple MRBs within a single insurance contract will likely affect each other's fair values.

In theory, the requirement to value the components together could yield different results than if each of the components was valued separately. For example, we expect that the volatility of the combined MRBs would be lower than the volatility when valuing the components separately, potentially resulting in a lower risk margin for the combined MRBs. Additionally, the interdependency of certain

assumptions emphasizes the requirement to perform a combined valuation. Lapse assumptions for variable annuity products tend to be more dependent on the extent to which the guaranteed minimum living benefits are "in-the-money" than the factors affecting the GMDBs if the GMDB were valued separately.

5.6.3 *MRB – instrument-specific credit risk*

ASC 944-40-35-8A requires that changes in the fair value of market risk benefits be recognized in net income, except that fair value changes attributable to a change in the instrument-specific credit risk of issued MRBs are required to be recognized in other comprehensive income. The requirement to report changes attributable to the instrument-specific credit risk in other comprehensive income rather than in earnings is consistent with the accounting for a change in fair value of a liability caused by a change in credit risk when the fair value option is elected under ASC 825, *Financial Instruments*. The FASB also understands that insurance entities typically exclude the risk of non-performance in the development of their hedging strategies.

Question IG 5-25 addresses the accounting for changes in fair value of the market risk benefit in an asset position due to the reporting entity's own credit risk.

Question IG 5-25

ASC 944-40-35-8A states "...The portion of a fair value change attributable to a change in the instrument-specific credit risk of market risk benefits in a liability position shall be recognized in other comprehensive income." Does this imply that a reporting entity cannot include the portion of the change in fair value relating to its own credit risk (instrument-specific credit risk) in other comprehensive income if the market risk benefit fair value is in an asset position?

PwC response

No. Any changes in instrument-specific credit risk of the reporting entity included in the fair value of its market risk benefit, whether in an asset or liability position, should be recognized in OCI. The FASB included the word "liability" to emphasize that the only changes due to instrument specific credit risk recognized in other comprehensive income should be that of the reporting entity and should exclude nonperformance risk of a reinsurance entity or other counterparty to a market risk benefit.

Consistent with the liability fair value option guidance in ASC 825, instrument-specific credit risk for MRBs is measured as the portion of the periodic change in fair value that is not due to changes in a base market rate, such as a risk-free interest rate (the "base rate method"). There is no guidance provided in terms of what portion of the spread above risk-free constitutes "instrument-specific." An alternative method may be used if it is considered to faithfully represent the portion of the total change in fair value resulting from a change in instrument-specific credit risk. Other potential choices may include the portion of the periodic change in fair value that is not due to changes in the risk-free rate plus or minus any combination of the following: (1) industry sector spread, (2) overall individual company credit standing, or (3) individual company credit standing for a specific product. The selected methodology is a policy election and will need to be disclosed, if material, and consistently applied to each financial liability from period to period.

5.6.4 *Nonperformance risk – components of hybrid instruments*

Determining the nonperformance risk relating to the components of an insurance contract containing an MRB that is bifurcated for financial reporting purposes (e.g., a variable annuity with a guaranteed minimum accumulation benefit) requires consideration of the nature of the hybrid instrument's contractual terms and whether payments under each of the contractual components (i.e., the host contract and the market risk benefit) have the same or different credit standings. Essentially, the individual components should be treated as separate liabilities of a single entity that may have different levels of nonperformance risk. For example, in the case of a variable annuity with a GMAB, the variable annuity host liability may be fully collateralized by related separate account assets, while the bifurcated minimum guarantee is not. In such a case, the nonperformance risk of the bifurcated market risk benefit would need to be considered separately based on its specific attributes. Additional data points in determining nonperformance risk may include credit spreads or credit default swaps spreads and should consider the issuing entity credit data when determining the nonperformance risk of regulated subsidiaries.

5.6.5 *Guarantees related to future contract deposits*

An insurance or investment contract, such as a variable annuity with a guarantee feature, may provide a guaranteed return on future potential deposits, in addition to existing deposits, for a specified fee that is other than a current market fee.

The guarantee, and the right to make future deposits that will be subject to the guarantee, are attributes of the existing contract. Therefore, such guarantees need to be incorporated into the valuation if a market participant would incorporate these attributes into the price at which it would be willing to execute the transaction.

5.6.6 *MRB annuitization benefits*

For contracts with guaranteed minimum annuitization or withdrawal benefits accounted for at fair value as MRBs, ASC 944-40-35-8B provides guidance on the accounting at the date of annuitization or extinguishment of the account balance. That date marks the end of one accounting contract (the deferred annuity contract with an MRB recognized at fair value) and the beginning of a new contract (the payout annuity). This is because the payout phase is viewed as a separate contract and is not combined with the accumulation phase, as noted in ASC 944-30-35-3. At the date of annuitization or extinguishment (for withdrawal benefits), the MRB would be derecognized, and any amount in AOCI relating to changes in instrument-specific credit risk would be reversed to OCI. The derecognized MRB amount, along with the derecognized account balance (if any), would be the "in substance" single pay premium used to derive the deferred profit liability recognized at inception of the payout annuity when the "in substance" premium exceeds the liability for future policy benefits. The payout annuity is a new contract for accounting purposes, the liability for which is subject to limited payment accounting, as described in IG 5.3.

Example IG 5-7 and Example IG 5-8 illustrate the accounting upon the election of the annuitization option for a GMIB feature and upon the extinguishment of the account balance (i.e., when the account balance goes to zero) for a GMWB feature accounted for as an MRB, in accordance with ASC 944-40-35-8B.

EXAMPLE IG 5-7

Accounting upon the election of the annuitization option for a GMIB feature accounted for as an MRB

Insurance Company issues a deferred annuity contract with a GMIB feature that is accounted for as an MRB. At the annuitization date, the contract holder account balance plus the MRB fair value is equal to $99, and a cumulative decrease in the MRB's instrument-specific credit risk since the inception of the contract of $1 has resulted in an existing credit balance in AOCI. Upon annuitization, the liability for future policy benefits for the payout annuity is $90 (measured in accordance with the initial recognition guidance for limited payment contracts in ASC 944-40-30-7).

What is the accounting upon the election of the annuitization option for a GMIB feature accounted for as an MRB?

Analysis

In accordance with ASC 944-40-35-8B, Insurance Company would record the following journal entry to derecognize the unrealized instrument-specific credit risk through OCI. Insurance Company would not record a gain or loss in net income because there is no settlement of an obligation for an amount less than the contractual obligation amount (i.e., no realization of Insurance Company's previously estimated nonperformance).

Dr. AOCI	$1	
Cr. MRB liability		$1

Insurance Company would record the following journal entry to reflect the annuitization using the derecognized contract holder account balance and the MRB liability as the "in substance" premium for the payout annuity.

Dr. Contract holder account balance and MRB liability	$100	
Cr. Liability for future policy benefits		$90
Cr. Deferred profit liability		$10

In this entry, a deferred profit liability is recognized at the inception of the payout annuity because the "in substance" premium exceeds the liability for future policy benefits. If the "in substance" premium was less than the liability for future policy benefits, an immediate loss would be recognized through earnings. There is diversity in practice as to whether premium revenue and claims expense are separately recognized in the statement of operations in the period of annuitization or, since the transaction is not a new sale, the amounts are netted.

EXAMPLE IG 5-8

Accounting upon the extinguishment of the account balance (i.e., when the account balance goes to zero) for a GMWB feature accounted for as an MRB

Insurance Company issues a deferred annuity contract with a GMWB feature that is accounted for as an MRB. At the date of extinguishment of the account balance, the MRB fair value is $99, and a

cumulative decrease in the MRB's instrument-specific credit risk since the inception of the contract of $1 has resulted in an existing credit balance in AOCI. Upon extinguishment, the liability for future policy benefits for the payout annuity is $90 (measured in accordance with the initial recognition guidance for limited payment contracts in ASC 944-40-30-7).

What is the accounting upon the extinguishment of the account balance (i.e., when the account balance goes to zero) for a GMWB feature accounted for as an MRB?

Analysis

In accordance with ASC 944-40-35-8B, Insurance Company would record the following journal entry to derecognize the unrealized instrument-specific credit risk through OCI. Insurance Company would not record a gain or loss in net income because there is no settlement of an obligation for an amount less than the contractual obligation amount (i.e., no realization of Insurance Company's previously estimated nonperformance).

Dr. AOCI	$1	
Cr. MRB liability		$1

Insurance Company would record the following journal entry to reflect the extinguishment using the derecognized MRB liability as the "in substance" premium for the payout annuity.

Dr. MRB liability	$100	
Cr. Liability for future policy benefits		$90
Cr. Deferred profit liability		$10

In this entry, a deferred profit liability is recognized at the inception of the payout annuity because the "in substance" premium exceeds the liability for future policy benefits. If the "in substance" premium was less than the liability for future policy benefits, an immediate loss would be recognized through earnings. There is diversity in practice as to whether premium revenue and claims expense are separately recognized in the statement of operations in the period of annuitization or, since the transaction is not a new sale, the amounts are netted.

5.7 Measurement – derivatives in insurance/investment contracts

Insurance entities issue various types of insurance and investment contracts, and reinsurance contracts, with embedded derivatives. These include certain equity indexed life and annuity contracts and reinsurance contracts with returns based on referenced investment portfolios.

The derivative accounting guidance in ASC 815-10-15-13 provides a scope exception from derivative accounting for certain insurance contracts and market risk benefits. Contract features need to be assessed to determine if the scope exemption applies or if accounting as an embedded derivative is required. ASC 815-15-55-66 through ASC 815-15 55-69 notes that the equity-indexed return portion of the contract will generally be required to be separated from the host and accounted for as a derivative. See IG 2.4 for additional considerations surrounding long-duration insurance contract classification. Refer to IG 9.9 for additional details on reinsurance contracts that contain embedded derivatives.

Features that meet the definition of an embedded derivative are required to be accounted for at fair value. Unlike market risk benefits, the entire change in fair value of the embedded derivative is recognized through income. Consideration should be given to the measurement of the embedded derivatives and related guidance, including the issues identified in IG 5.7.1 through IG 5.7.3.

5.7.1 Insurance contracts with embedded derivatives

ASC 820 requires that a fair value measurement reflect the price the transferor would pay to transfer the liability in an orderly transaction between market participants at the measurement date, even if there is no active market in which to transfer insurance and investment contract liabilities and the embedded derivatives in such contracts, and even if transfer is not permitted under the terms of the contract. Therefore, an entity valuing a contract or embedded derivative component of a contract in the absence of an observable market would need to determine the hypothetical market in which the transfer would occur.

Some insurance entities have suggested that reinsurance is the exit market for insurance contracts, investment contracts, and embedded derivative components of such contracts. While the typical indemnity reinsurance transaction may be a viable way to economically transfer the risks related to these contracts, the ceding entity is still primarily obligated to the insured parties, and, thus, indemnity reinsurance is not equivalent to a complete transfer of the obligation as contemplated in ASC 820. While actual or hypothetical reinsurance transactions may offer data points and inputs into the fair value measurement, they would not necessarily be representative of an exit price. Accordingly, if reinsurance transactions (either actual or hypothetical) are used as inputs, how those inputs might differ from an actual transfer would need to be considered, including reinsurance contract terms, such as termination provisions, loss limits, potential premium adjustment provisions, remaining services provided by the cedant (such as policy administration and claims handling), and compliance (primary obligor risks, such as market conduct and reputational risks).

As an alternative to reinsurance, another direct insurance entity may provide a hypothetical market, possibly viewed in the context of a business acquisition. Such an approach would require consideration of what type of acquirer is involved in the business acquisition. That is, whether the buyer would be a strategic buyer or a financial buyer, the size of the buyer and size of the portfolio that would be purchased, the efficiencies in administrative systems of a typical market participant, and other factors.

Because of their unique features and lack of an established active market for transfers of the obligations, determining the fair value of many, if not all insurance and investment contracts or embedded derivative components of such instruments will require significant unobservable inputs. As a result, the fair value measurements are likely to be Level 3 measurements for fair value hierarchy disclosure purposes. Such unobservable inputs will reflect the insurance entity's assumptions about the assumptions market participants would use in pricing the specific portfolio, using the best information available, which might include the entity's own data. The insurance entity's own data

should be adjusted if information indicating that market participants would use different assumptions is reasonably available without undue cost and effort. However, in many cases, there may be no reason to believe that the insurance entity's own assumptions are not consistent with those of a typical market participant.

5.7.2 *Nonperformance risk – embedded derivatives*

ASC 820 requires that the fair value of a liability reflect the nonperformance risk (including credit risk) relating to that liability. In the debt market, changes in either an entity's specific credit rating or general credit spreads will typically have a direct and immediate impact on the fair value of the instrument. However, for certain insurance and investment contracts, premium pricing can be relatively insensitive to changes in ratings that relate to an insurer's claim paying ability or overall financial strength (at least within the upper levels of credit). For example, for retail products, consumers often do not distinguish a difference in claim paying ability above some level that is deemed acceptable. The commercial insurance and reinsurance markets may be somewhat more sensitive to credit rating changes.

The existence of state or other governmental guaranty funds and collateralization may also serve to reduce the significance of nonperformance risk in these measurements. As discussed in FV 8.1.1, credit risk may differ among liabilities of the same entity for a number of reasons. In addition to the items highlighted within that section, insurance contract liabilities may have other features that may be considered when measuring fair value. For example, variable annuity, variable life, and certain pension contracts may be collateralized by insurance entity separate account assets. Funds in a separate account are not commingled with other assets of the insurance entity for investment purposes. In the US, certain separate account assets are legally insulated from the general account liabilities of an insurance entity, such that the separate account contract holder is not subject to an insurer's default risk to the extent of assets held in the separate account. While separate account liabilities are generally collateralized by the related separate account assets, the extent of the legal insulation provided by the separate account arrangement may vary from jurisdiction to jurisdiction.

Another unique aspect of insurance entity operations is state guaranty funds, which help to pay claims of insolvent insurance entities. State laws specify the lines of insurance covered by these funds and the dollar limits payable. Although ASC 820-10-35-18A states that guarantees of liabilities should not be considered by the issuing entity in determining the fair value of the liability, ASC 825-10-25-13b exempts government guarantees from this exclusion.

In order to consider collateralization, a third-party, or a governmental guarantee in valuing a liability, such a feature must be an attribute of the instrument and inseparable from it. For example, with regard to state guaranty funds, it may be appropriate to consider their impact in the assessment of nonperformance risk if the guarantee would apply to the contract in the event the liability were transferred (i.e., if the guaranty fund remains obligated to provide its guarantee on the contract liability). This fact should be verified with appropriate legal or regulatory experts, as laws may vary by state and by type of insurance contract. Other restrictions may also exist, such as limitations on the amount of coverage provided by the guaranty fund for specific types of contracts.

See IG 5.6.3 and IG 5.6.4 for additional considerations around nonperformance risk.

5.7.3 *Identification of risk margins for significant assumptions*

ASC 820 requires that inputs to valuation techniques include the assumptions that market participants would use in pricing the asset and liability, including assumptions about risk. This includes the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique. However, ASC 820 does not require that a separate risk margin be explicitly estimated for each input into a fair value estimate.

For fair value measurements that use a present value technique, ASC 820-10-55 provides guidance on how assumptions about risk can be factored into the present value calculation, describing three different methods that adjust the cash flows for risk. One method, the discount rate adjustment technique, uses a single set of cash flows (contractual, promised, or most likely) and a risk-adjusted discount rate to capture all the risk and uncertainty of that single set of cash flows. However, this method assumes that the release of all risks is purely time based, which will not always be the case. The other two methods are variations of the expected cash flow technique. The first uses risk-adjusted expected cash flows discounted using a risk-free rate, so that the entire risk premium is captured in the cash flows. The second uses expected cash flows and a risk-adjusted discount rate (but different from the risk-adjusted rate used in the discount rate adjustment technique). This method thereby captures the risk and uncertainty through use of both expected cash flows and the discount rate. In addition, market participants might apply industry-based risk assumptions, such as risk-neutral or policyholder behavior assumptions with risk margins. If specific risk measurement methodologies are used for certain types of policies or contracts by market participants, they should be considered in the measurement of fair value under ASC 820.

5.8 *Measurement – additional liability for insurance benefits*

Many nontraditional contract features have market risk, and would most likely be classified as MRBs or embedded derivatives. However, there are certain features that lack market risk or otherwise fail the criteria for MRB and embedded derivative classification but provide additional benefit beyond the account balance or base insurance coverage. Contract features that do not meet the criteria of market risk benefits (MRBs) or embedded derivatives are required to be accounted for under the guidance relating to death or other insurance benefits or annuitization benefits (see IG 2.4.5.2). These include certain two-tiered annuities, no-lapse guarantees on universal life-type insurance contracts, and waiver of premium policies.

A two-tiered annuity has two crediting rates: one used to calculate the account balance available for surrender and the other, typically higher, used to calculate the balance available to the contract holders if they elect to annuitize. A "no-lapse guarantee" is a contract provision whereby the life insurance protection is kept in force, even when the account balance is not sufficient to pay the cost of insurance or other charges. A waiver of premium benefit provides that in the event of disability, a contract holder's premium (the cost of insurance or COI charge) will be waived but the policy will remain in force.

5.8.1 *Additional liability for death or other insurance benefit*

For contracts with death or other insurance benefits, ASC 944-40-25-27A requires that if amounts assessed against the contract holder each period for an insurance benefit feature are assessed in a

manner that is expected to result in profits in earlier years and losses in later years from the insurance benefit function, an insurer is required to establish an additional liability. The liability represents the portion of assessments that compensates the insurer for benefits to be provided in future periods (commonly referred to as an "SOP 03-1 liability" or "SOP 03-1 reserve"). The test for profits followed by losses is required to be performed on a contract-by-contract basis, at contract inception, and is not revisited.

Although ASC 944-40-25-27A uses the words "profits in earlier years and losses in subsequent years" ("profits followed by losses"), we believe the requirement also applies to situations when the feature creates losses followed by losses (i.e., situations in which charges that are attributable to an insurance-benefit feature are less than the expected cost of the insurance benefit in all periods.) This is consistent with the concept inherent in ASC 944-40-30-20, that the insurance entity is required to establish a liability if it provides an insurance benefit in future periods for which it charges amounts in such periods that are less than the expected value of the insurance benefits to be provided.

The profits followed by losses test should be applied separately to the base mortality or morbidity feature and, in addition, applied separately to each other mortality or morbidity feature. This applies when assessing products that have a base mortality feature (e.g., universal life insurance) but also have an additional insurance-benefit feature, such as a no-lapse guarantee or a long-term care benefit acceleration rider.

Question IG 5-26 addresses which assessments should be used in the profits followed by losses test.

Question IG 5-26

What is meant by "amounts assessed against the contract holder for the insurance benefit feature" for purposes of the profits-followed-by-losses test in ASC 944-40-25-27A? That is, should such assessments be limited to those explicitly charged for the insurance benefit feature being tested, or, in certain instances, should fees from other contract elements be allocated as additional assessments supporting the insurance benefit feature?

PwC response

There is a rebuttable presumption that the explicit fee should be used for the profits followed by losses test. However, there may be circumstances in which the presumption may be overcome if evidence indicates that the substance of the agreement is not captured in the explicit terms of the contract. For example, in some universal life policies, the product's base mortality function is designed and priced on an integrated basis with the other functions. In other products, there may be no explicit fee; instead, the fee is implicit in the total contract charges. However, it is unlikely that the presumption can be rebutted when a contract has an explicit incremental assessment upon the election of a separate insurance benefit feature that is not payable if the election is not made.

Question IG 5-27 addresses the manner of assessing the pattern of profits followed by losses.

Question IG 5-27

When determining whether "the amounts assessed against the contract holder each period for the insurance benefit feature are assessed in a manner that is expected to result in profits in earlier years and losses in subsequent years from the insurance benefit function," what is meant by "expected?"

PwC response

A range of scenarios should be analyzed to determine whether there are any scenarios in which profits are expected in earlier years and losses are expected in later years from the insurance benefit function. A single best estimate, a mean, a median, or a specified percentile of the scenarios should not be used.

When an additional liability is required, the death or other insurance benefit liability should be recognized in accordance with ASC 944-40-30-20 through ASC 944-40-30-25.

ASC 944-40-30-20

The amount of the additional liability recognized under paragraph 944-40-25-27A shall be determined based on the ratio (benefit ratio) of the following:

a. Numerator. The present value of total expected excess payments over the life of the contract, discounted at the contract rate.

b. Denominator. The present value of total expected assessments over the life of the contract, discounted at the contract rate.

Total expected assessments are the aggregate of all charges, including those for administration, mortality, expense, and surrender, regardless of how characterized.

The contract rate used to compute present value shall be either the rate in effect at the inception of the book of contracts or the latest revised rate applied to the remaining benefit period. The approach selected to compute the present value of revised estimates shall be applied consistently in subsequent revisions to computations of the benefit ratio.

The benefit ratio determined in ASC 944-40-30-20 may exceed 100%, resulting in a liability that exceeds cumulative assessments. This is different from the accounting for traditional and limited-payment contracts. The additional liability would be a component of the universal life-type contract premium deficiency test, which is typically performed at a higher level, and could yield a premium deficiency loss at that higher grouping level (see IG 7.3.2 for a discussion of premium deficiency).

For contracts in which the assets are reported in the general account, investment margins (i.e., amounts expected to be earned from the investment of policyholder balances less amounts credited to policyholder balances) are included with any other assessments for purposes of calculating total assessments in the ratio. However, ASC 944-40-30-22 clarifies that “policyholder balances” refers to the accrued account balance described in ASC 944-40-25-14, which excludes the death or other insurance benefit liability itself.

Assessments for purposes of the ASC 944-40-30-20 benefit ratio denominator would also include the amount being amortized through income in each period relating to any unearned revenue liability (see IG 5.4.3 for a discussion of deferred revenue amortization) and exclude any fees deferred as an increase in the unearned revenue liability.

Question IG 5-28 addresses no-lapse guarantee excess payments.

Question IG 5-28

What are considered to be the "excess payments" for a no-lapse guarantee contract feature?

PwC response

One interpretation is that the excess payments are the death benefit payments that are made, or are expected to be made, while the no-lapse-guarantee provision is activated (i.e., while the account balance is insufficient to pay the cost of the insurance).

In calculating the present value of expected excess payments and total assessments and investment margins, insurers should use a range of scenarios that consider the volatility inherent in the assumptions rather than a single set of best estimate assumptions. The number of scenarios should be sufficient such that increasing that number would yield a materially similar result. In addition, the scenarios should include the tails of the distribution rather than only reasonably possible and probable scenarios.

As required by ASC 944-40-35-9, these assumptions should be evaluated regularly and, if actual experience or other evidence suggests the need for revision, the liability should be adjusted on a retrospective catch up basis, with a related charge or credit to benefit expense. That is, the revised estimate of the present value of total expected excess payments and the present value of total expected assessments and investment margins should be calculated as of the balance sheet date using historical experience from the issue date to the balance sheet date and estimated experience thereafter. The revised benefit ratio would be considered the "current benefit ratio" referenced in the guidance in ASC 944-40-35-10 to be used in calculating the additional liability.

ASC 944-40-35-10

The additional liability at the balance sheet date shall be equal to:

a. The current benefit ratio multiplied by the cumulative assessments (cumulative assessments shall be calculated as actual cumulative assessments, including investment margins, if applicable, recognized from contract inception through the balance sheet date)

b. Less the cumulative excess payments (including amounts reflected in claims payable liabilities)

c. Plus accreted interest.

However, in no event shall the additional liability balance be less than zero.

Question IG 5-29 addresses the level of aggregation for measuring the additional liability.

Question IG 5-29

Is the additional liability calculated at an individual contract level, or at some higher group level?

PwC response

Although the accounting for a universal life-type contract is typically done on an individual contract basis, the calculations required by ASC 944-40-35-9 and ASC 944-40-35-10 for the additional insurance benefit liability require analysis of actual experience, implicitly requiring the grouping of a block of similar contracts.

5.8.2 *Additional liability for annuitization benefits*

Contracts with benefits payable only upon annuitization that do not fall within the scope of accounting as MRBs or derivatives require the recognition of an additional liability for the contract feature if the present value of the expected annuitization payments at the expected annuitization date exceeds the expected account balance at the expected annuitization date. The liability should be recognized in accordance with ASC 944-40-30-26 through ASC 944-40-30-29. ASC 944-40-25-26 notes that examples include certain annuity purchase mortality guarantees and two-tier annuities. The test to determine if an additional liability is required is performed on a contract-by-contract basis, at contract inception, and is not revisited.

ASC 944-40-30-26

The additional liability required under paragraph 944-40-25-27 shall be measured initially based on the benefit ratio determined by the following numerator and denominator:

a. Numerator. The present value of expected annuitization payments to be made and related incremental claim adjustment expenses, discounted at an upper-medium grade (low-credit-risk) fixed-income instrument yield applicable to the payout phase of the contract, minus the expected accrued account balance at the expected annuitization date (the excess payments). The excess of the present value payments to be made during the payout phase of the contract over the expected accrued account balance at the expected annuitization date shall be discounted at the contract rate.

b. Denominator. The present value of total expected assessments during the accumulation phase of the contract, discounted at the contract rate.

Total expected assessments are the aggregate of all charges, including those for administration, mortality, expense, and surrender, regardless of how characterized.

Consistent with the guidance relating to the additional liability for death or other insurance benefits, in calculating the benefit ratio for contracts in which the assets are reported in the general account, investment margins (i.e., amounts expected to be earned from the investment of policyholder balances less amounts credited to policyholder balances) are included with any other assessments for purposes of calculating total assessments in the ratio. However, ASC 944-40-30-22 clarifies that policyholder balances refers to the accrued account balance described in ASC 944-40-25-14, which excludes the annuitization benefit liability itself.

Excess payments are calculated as the present value of the expected annuitization payments to be made and related incremental claim adjustment expenses, less the expected accrued account balance on the expected annuitization date. The calculation should be based on expected experience, over a range of scenarios that considers the volatility inherent in the assumptions rather than a single set of best estimate assumptions. When determining expected excess payments, the expected annuitization rate is one of the assumptions. This annuitization rate should be dynamic, taking into account company and industry experience, as applicable, as well as the value of the benefit.

The periodic future annuitization benefits expected to be paid during the annuitization phase are discounted back to the future expected annuitization date using the upper-medium grade (low credit risk) fixed-income instrument yield to determine the excess benefit upon annuitization. This amount is then discounted to the current period using the contract liability discount rate.

The discount rate is not locked in for expected annuitization benefits subject to ASC 944-40-30-26. The rate is required to be updated each period consistent with other components of the annuitization benefit cash flows. Changes in the discount rate applied to the future annuitization payments will be reflected in the benefit ratio and recognized over time as the benefit ratio is applied to total assessments.

As required by ASC 944-40-35-12 and ASC 944-40-35-13, these assumptions should be evaluated regularly and, if actual experience or other evidence suggests the need for revision, the liability should be adjusted on a retrospective catch up basis, with a related charge or credit to benefit expense. That is, the revised estimate of the present value of total expected excess payments and the present value of total expected assessments and investment margins should be calculated as of the balance sheet date using historical experience from the issue date to the balance sheet date and estimated experience thereafter. The revised benefit ratio would be considered the "current benefit ratio" referred to in the guidance in ASC 944-40-35-14 to be used in calculating the additional liability.

ASC 944-40-35-14

The additional liability at the balance sheet date shall be equal to the sum of the following:

a. The current benefit ratio multiplied by the cumulative assessments

b. Accreted interest (an addition)

c. At time of annuitization, the cumulative excess payments determined at annuitization (a deduction).

However, in no event shall the additional liability balance be less than zero.

At the actual date of annuitization of an individual policyholder, cumulative excess payments for that policyholder are calculated using assumptions specific to that policyholder and are deducted from the additional liability. Any remaining additional liability relating to the policyholder, along with the account balance and any other derecognized liabilities related to the contract upon annuitization, is the "in substance" single premium used in establishing the liability for future policy benefits for the new payout annuity. The payout annuity is a new contract for accounting purposes, the liability for which is subject to limited payment accounting described in IG 5.3. To the extent that the "in substance" premium exceeds the liability for future policy benefits, a deferred profit liability is

recognized at the inception of the payout annuity. If the "in substance" premium was less than the liability for future policy benefits, an immediate loss would be recognized through earnings. There is diversity in practice as to whether premium revenue and claims expense are separately recognized in the statement of operations in the period of annuitization or, since the transaction is not a new sale, the amounts are netted.

See Example IG 5-7 for similar journal entries.

5.9 Policyholder dividends

Both long-duration life insurance contracts and short-duration property and casualty insurance contracts may include provisions for policyholder dividends. Policies with dividend features may be sold by both mutual and stock life insurance entities.

5.9.1 *Dividend features based on the contribution principle*

Policyholder dividend features in certain long-duration participating contracts that meet the definition outlined in ASC 944-20-15-3 (referred to as the contribution principle) are recognized over the life of the contracts.

ASC 944-20-15-3

Consistent guidance in the Long-Duration Subsections in this Subtopic (and other Subtopics within the Financial Services—Insurance Topic) applies only to certain long-duration participating life insurance contracts of mutual life insurance entities and certain stock life insurance entities. For purposes of that guidance:

a) Mutual life insurance entities include assessment entities, fraternal benefit societies, and stock life insurance subsidiaries of mutual life insurance entities.

b) Participating life insurance contracts denote those that have both of the following characteristics:

1) They are long-duration participating contracts that are expected to pay dividends to policyholders based on actual experience of the insurance entity.

2) Annual policyholder dividends are paid in a manner that both:

a) Identifies divisible surplus

b) Distributes that surplus in approximately the same proportion as the contracts are considered to have contributed to divisible surplus (commonly referred to in actuarial literature as the contribution principle).

Annual policyholder dividends on participating contracts are based on actual performance of the insurance enterprise, and the guidance requires that such dividends be reported separately as an expense in the statement of earnings and be based on estimates of amounts incurred for the policies in effect during the period.

ASC 944-40-25-30 and ASC 944-40-35-22 also require that a liability for terminal dividends be accrued in the liability for future policy benefits if payment of the dividend is probable and the amount can be reasonably estimated, which would ordinarily be the case. Because the rights to terminal dividends accumulate to policyholders over a policy's life, the terminal dividends should be recognized as an expense over the life of a book of participating life insurance contracts at a constant rate based on the present value of the base used for the amortization of DAC.

Many mutual entities set up special structures for the dividend participating contracts called "closed blocks" when they demutualize. Guidance on accounting by insurance enterprises for demutualizations and the formation of mutual insurance holding entities and for certain long-duration participating contracts can be found in the demutualizations subsection of ASC 944-805, *Insurance - Business Combinations*.

5.9.2 *Dividend features not using the contribution principle*

For those participating contracts not using the contribution principle identified in ASC 944-20-15-3, the determination of the amount of the dividend is based upon the policy provision, applicable law, company policy, and the actions of the board of directors in accordance with guidance in ASC 944-50-30-1 through ASC 944-50-30-3.

Participating Contracts

ASC 944-50-30-1

Policyholder dividends accrued under paragraph 944-50-25-1 shall be measured using an estimate of the amount to be paid

Participating Contracts with Income-Based Dividend Limitations

ASC 944-50-30-2

Income-based dividend provisions for participating contracts other than those long-duration participating life insurance contracts that meet the criteria in paragraph 944-20-15-3, shall be based on net income that includes adjustments between general-purpose and statutory financial statements that will reverse and enter into future calculations of the dividend provision.

Participating Contracts Without Income-Based Dividend Limitations

ASC 944-50-30-3

Policyholder dividends shall be recognized over the premium-paying periods under paragraph 944-50-25-3 based on dividends anticipated or intended in determining gross premiums or as shown in published dividend illustrations at the date insurance contracts are made.

Group contracts may also have dividend provisions based upon the experience of the group or upon the level of investment return that the group's funds have generated. Such payments are not generally considered dividends as that term is defined in ASC 944-50-30-1 through ASC 944-50- 30-3, as they are determined on an individual contract basis rather than on a class of contract basis.

Most insurance entities do not pay policyholder dividends. For those entities still paying a dividend, the undeclared dividends should be accrued at the balance sheet date using the best available estimate of the amount of dividends to be paid, as described in ASC 944-50-30-1 through ASC 944-50-30-3.

Policyholder dividends are charged against income. "Dividends" related to the experience of a group contract generally reduce premium income or are recognized as credits to contract holder funds.

5.10 "Shadow" accounting

Most insurance entities classify many of their debt security investments as available for sale (AFS). AFS investment accounting recognizes unrealized gains and losses relating to the securities' remeasurement each period to fair value in OCI. ASC 320-10-S99-2 requires that the carrying amount of certain assets and liabilities be adjusted to the amount that would have been reported if the unrealized holding gains and losses from AFS securities had been realized (often referred to as a "shadow" OCI adjustment). Accounts that could require a shadow adjustment include noncontrolling interests, certain policyholder liabilities, and intangible assets arising from insurance contracts acquired in business combinations that are amortized using the gross-profits method. Shadow adjustments are recognized with a corresponding credit or charge reported directly to other comprehensive income. The accounting prescribed should not affect reported net income.

ASU 2018-12 de-linked invested assets from the valuation of traditional insurance and limited payment contract liabilities and divorced the amortization of certain assets and liabilities from the expected profit emergence pattern. The FASB and SEC have not updated the guidance in ASC 320-10-S99-2 for the provisions of ASU 2018-12. ASC 320-10-S99-2 still cites potential shadow adjustments for deferred acquisition costs and premium deficiency for traditional and limited-payment contracts to the extent that a premium deficiency would have resulted had unrealized holding gains and losses on assets supporting the liabilities been realized. Upon the adoption of ASU 2018-12, these are not instances that would generate a shadow adjustment.

In situations when the contractual liability or asset has already been adjusted through income for the fair value of the related asset (e.g., due to the requirements of derivative accounting or accounting for long-duration contracts), shadow adjustments are not appropriate. While only required for registrants, most insurers follow ASC 320-10-S99-2 in practice.

Figure IG 5-4 summarizes the insurance balances that may require shadow adjustments.

Figure IG 5-4
Insurance balances that may require shadow adjustments

Balance	Contracts impacted	Shadow adjustment required	Explanation
Premium deficiency loss recognition testing	All contracts other than nonparticipating traditional and limited-payment contracts	Depends	A premium deficiency test is required for contracts other than nonparticipating traditional and limited-payment contracts, as described in IG 7.3. To determine if a premium deficiency exists, the expected cash outflows and expected cash inflows relating to the contract should be considered. The significant assumptions outlined in ASC 944-60-25-7 include investment yields. If entities use their updated "book" investment yields to determine any income statement premium deficiency charge, an additional shadow calculation is then performed using current market yields. The impact on the liability of using current market rates rather than updated book investment yields to discount the cash flows in performing the premium deficiency test will result in a corresponding shadow adjustment in OCI.
Recoverability test of PVFP	Nonparticipating traditional and limited-payment contracts	Depends	The net premium ratio used to calculate the liability for future policy benefits for traditional and limited-payment contracts is required to be updated at least annually and is capped at 100%, which represents the premium deficiency test on the liability. However, as noted in IG 7.3, ASC 944-60-25-7 also requires a separate recoverability test of the unamortized PVFP balance and identifies "investment yields" as one of the assumptions that may be used in assessing the recoverability of PVFP. If book investment yields relating to AFS securities are used in performing the PVFP recoverability test for traditional and limited payment contracts, a shadow PVFP recoverability test would also need to be performed using current market yields in place of the book yields.
Additional liability for annuitization, death or other insurance benefits	Universal life-type contracts	Generally yes	ASC 944-40-30-26 and ASC 944-40-30-20 require the additional liability for annuitization, death, or other insurance benefits to be calculated based on a benefit ratio that is calculated as the present value of total expected excess payments divided by the present value of total expected assessments over the life of the contract (as noted in IG 5.8). Total assessments in the benefit ratio include the explicit fees charged to the policyholder for the feature as well as other administrative charges. In addition, for contracts in which the assets are reported in the general account, investment margins are included as part of total expected assessments in accordance with ASC 944-40-30-22. For general account contracts that include investment margins relating to AFS securities as part of total assessments, the hypothetical realization of any unrealized gains and losses on these investments would be included in the shadow assessments calculation for the liability, with a corresponding shadow adjustment in OCI.

Balance	Contracts impacted	Shadow adjustment required	Explanation
Amortization of PVFP	Long-duration insurance contracts	Depends	ASC 944-805 requires any insurance or reinsurance contract intangible asset (or additional liability) to be amortized "on a basis consistent with the related insurance or reinsurance liability," but does not prescribe specific methods. In some cases, an insurer may choose to amortize PVFP based on profit emergence, and that profit emergence may include consideration of book investment yields on AFS securities. Entities that amortize based on estimated gross profits or other methods that incorporate book investment yields on AFS securities would need to record shadow adjustments in OCI using current market yields in place of the book yields. Other insurers might analogize the balances to DAC as fixed intangible assets or liabilities to be amortized. In these instances, the PVFP is amortized on a straight-line basis consistent with the related DAC amortization method and there would be no shadow PVFP amortization.
Amortization of cost of reinsurance	Long-duration insurance contracts	Depends	ASC 944-605-35-14 requires that the cost of reinsurance be amortized over the remaining life of the underlying reinsured contracts if the reinsurance contract is long duration) or over the contract period of the reinsurance (if the reinsurance contract is short duration). However, ASC 944 is silent as to the pattern of amortization. In some cases, an insurer may choose to amortize the cost of reinsurance based on profit emergence, and that profit emergence may include consideration of book investment yields on AFS securities. Entities that amortize based on estimated gross profits or other methods that incorporate book investment yields on AFS securities would need to record shadow adjustments in OCI using current market yields in place of the book yields. Other insurers might analogize the balances to DAC as fixed intangible assets or liabilities to be amortized. In these instances, the cost of reinsurance would be amortized on a straight-line basis consistent with the related DAC amortization method and there would be no shadow cost of reinsurance amortization.
Policy dividend obligation (PDO)	Closed block participating contracts	Yes	Mutual life insurance entities can convert to stock life insurance entities through a process of demutualization. Upon demutualization, there are assets that are designated to the closed block to preserve reasonable policyholder dividend expectations. These assets cannot subsequently benefit the shareholders of the life insurance entity. The demutualization alone does not constitute an accounting event that would change the historical carrying value of the assets and liabilities attributed in the closed block. However, at the date of demutualization, the assets contributed to the closed block are based upon what is determined to be sufficient expected future earnings to cover the liabilities and policyholder dividend expectations of the closed block (glide path). To the extent that subsequent earnings of the closed block income exceed the glide path, a policyholder dividend obligation is established, as those earnings are not income of the stock life insurance entity but instead are owed to the closed block policyholders. To the extent those excess earnings are due to unrealized gains and losses on AFS securities, a corresponding shadow adjustment should be recognized to OCI.